KV8-MAX3

USER'S MANUAL

ABIT

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ABIT

Your Reliable Partner

KV8-MAX3

Socket 754 System Board User's Manual

4200-0389-12
Rev. 1.01

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If you do not properly set the motherboard settings, causing the motherboard to malfunction or fail, we cannot guarantee any responsibility.

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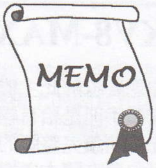


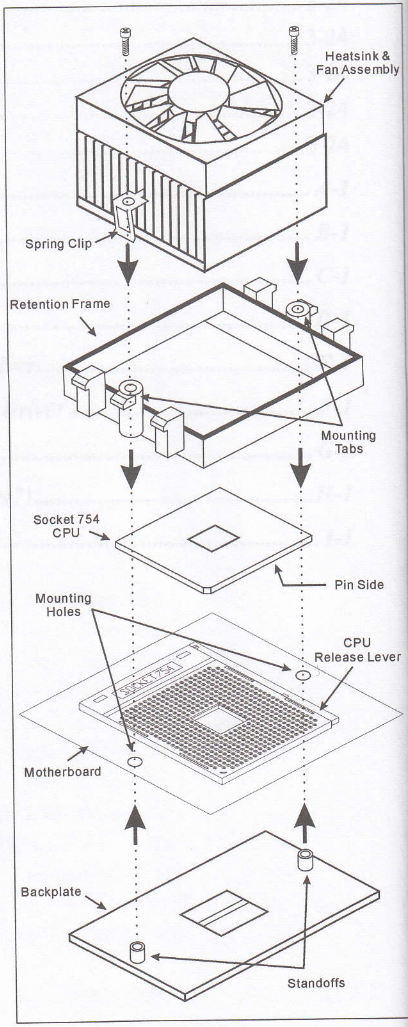
KV8-MAX3 快速安裝指引

如您要瞭解此主機板更詳細的資訊，請參閱我們的完整版使用手冊，裡面會有詳盡的說明。此快速安裝手冊是給有經驗的系統組裝者使用，如果這是您第一次嘗試來組裝您的電腦系統，我們建議您先去閱讀完整版的使用手冊，或是詢問技術人員來幫助您組裝您的電腦系統。（完整版的使用手冊已包覆在隨本主機板所附的驅動程式與應用光碟之中。）

處理器的安裝

本主機板提供零出力（Zero Insertion Force，ZIF）式 Socket 754，以方便安裝 AMD Socket 754 CPU。您所購買的 CPU 應已配備一組套件，內含散熱片、冷卻風扇、風扇固定框架和底座面板。如果沒有，請另行購買專為 Socket 754 設計的套件。

請參考這裡所表示的圖來安裝 CPU 中央處理器和散熱器。（僅供參考。您的散熱器與風扇組合可能不見得與這一個完全相同。）



1. 請找出這塊主機板的 Socket 754 位置。將 CPU 插座桿拉出至插座旁，然後將插座桿以 90 度角向上拉。
2. 將 CPU 的針腳面朝下，置入 CPU 插座。因為只能朝著一個固定的方向插入 CPU，如果遇到阻礙時，切勿勉強用力。最後壓住 CPU，栓上插座桿。
3. 將底座面板的固定腳對準主機板的架設孔。將主機板適當卡入底座面板。
4. 將風扇固定框架插入主機板，並且對準底座面板的固定腳。
5. 將散熱片放置在 CPU 的上方，並請確定散熱片適當置於風扇固定框架上。
6. 將兩側的彈簧夾勾住風扇固定框架上的框架調整片。鎖上螺絲釘，直到彈簧夾完全鎖緊為定。
7. 將散熱片與風扇組的風扇電源插頭，插入主機板上的 CPU 風扇電源接頭。

注意：請不要忘記去設定處理器正確的匯流排頻率和倍頻的數值。

將主機板安裝到機殼上

當您將處理器安裝到主機板上之後，您便可以開始將
主機板固定到電腦機殼。大多數的電腦機殼底座都有
機殼底座上的固定孔位對準。如果孔能對準並且有螺
您可以使用塑膠墊片來讓螺絲與主機板的 PCB 表層

安裝記憶體模組

1. 找出您主機板上 DIMM 插槽的位置。
2. 請您小心地抓住 DIMM 模組的兩側，請勿碰觸其接點。
3. 請將記憶體模組上的榫子與DIMM 插槽上的卡榫對準。
4. 穩固地施壓來將記憶體模組向下插入 DIMM 插槽，直到 DIMM 插槽兩側的模組固定夾自動地扣入記憶體模組的固定夾缺口為止。切勿太過施
以一個固定的方向來插入 DIMM 模組。
5. 要取出 DIMM 模組，請您向外側同時地壓下 DIM
組拔取出來。

注意：靜電會造成電腦或是附加卡上電子元件的損壞
自暫時地接觸已接地的金屬物體來放掉您身上所帶有

連接器、連接頭以及附加卡的安裝

在任何一部電腦機殼的裡面，都必需連接一些纜線與
至主機板的連接埠上，您必需注意任何一條纜線的連
一根針腳的位置。您將會安裝一些特殊功能的附加卡
卡等等。當您將它們安裝到主機板上適當的插槽之後
定好，避免有鬆動的情況發生。

如您想要瞭解相關且更為詳細的資訊，請參閱我們的

將電源供應器的電源線連接頭與主機板上的 ATX12V

請將電源供應器的 ATX 電源接頭確實地壓入主機板上

BIOS 的設定

當您將所有的硬體安裝完畢以後，就可以開啟電腦的
且更為詳細的資訊，請參閱我們的完整版使用手冊。

版使用手冊，裡面會有詳盡的說明。此快速
一次嘗試來組裝您的電腦系統，我們建議您
您組裝您的電腦系統。（完整版的使用手冊
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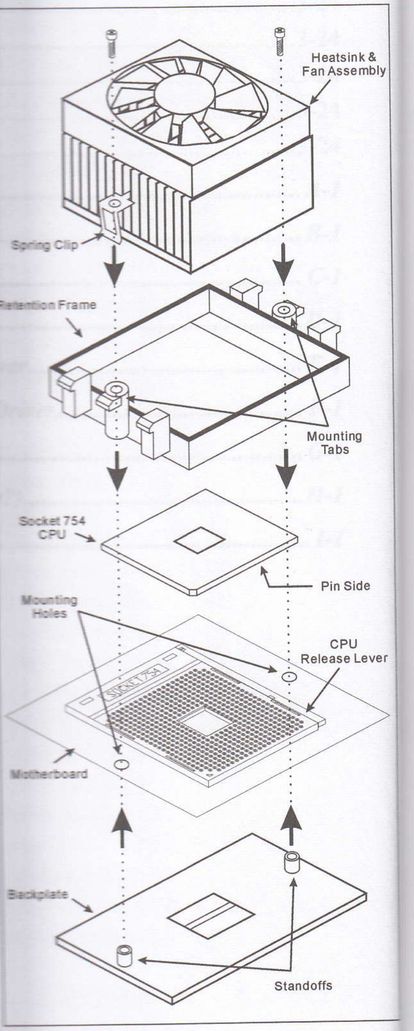
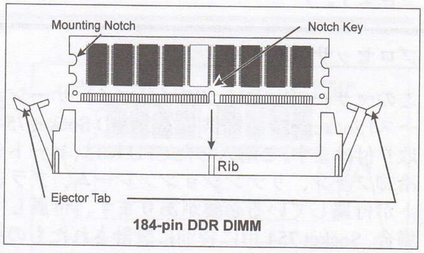


將主機板安裝到機殼上

當您將處理器安裝到主機板上之後，您便可以開始將主機板固定到電腦機殼裡去。首先；請您先將主機板固定到電腦機殼。大多數的電腦機殼底座都有許多的固定孔位，請將主機板上的固定孔位與機殼底座上的固定孔位對準。如果孔能對準並且有螺絲孔，就表示可使用銅柱來固定主機板。另外；您可以使用塑膠墊片來讓螺絲與主機板的 PCB 表層隔離（絕緣）。

安裝記憶體模組



184-pin DDR DIMM

1. 找出您主機板上 DIMM 插槽的位置。
2. 請您小心地抓住 DIMM 模組的兩側，請勿碰觸其接點。
3. 請將記憶體模組上的榫子與 DIMM 插槽上的卡榫對準。
4. 穩固地施壓來將記憶體模組向下插入 DIMM 插槽，直到 DIMM 插槽兩側的模組固定夾自動地扣入記憶體模組的固定夾缺口爲止。切勿太過施力地來將 DIMM 模組插入插槽，因爲您只能以一個固定的方向來插入 DIMM 模組。
5. 要取出 DIMM 模組，請您向外側同時地壓下 DIMM 插槽兩側的模組固定夾，即可將 DIMM 模組抽取出來。

注意：靜電會造成電腦或是附加卡上電子元件的損壞，在您要進行這些程序之前，請確認您已經藉由暫時地接觸已接地的金屬物體來放掉您身上所帶有的靜電。

連接器、連接頭以及附加卡的安裝

在任何一部電腦機殼的裡面，都必需連接一些纜線與插頭。這些纜線與插頭通常都是一對一的連接至主機板的連接埠上，您必需注意任何一條纜線的連接方向。如果可能的話，請一併注意連接埠第一根針腳的位置。您將會安裝一些特殊功能的附加卡到主機板上面，像是 SCSI 卡或是 AGP 顯示卡等等。當您將它們安裝到主機板上適當的插槽之後，請以螺絲將這些附加卡與機殼背板牢牢地固定好，避免有鬆動的情況發生。

如您想要瞭解相關且更爲詳細的資訊，請參閱我們的完整版使用手冊，裡面會有詳盡的說明。

將電源供應器的電源線連接頭與主機板上的 ATX12V 電源接頭連接起來

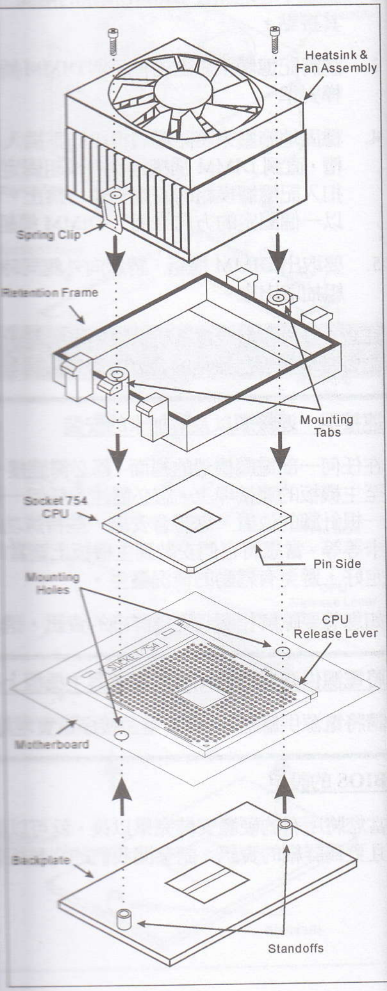
請將電源供應器的 ATX 電源接頭確實地壓入主機板上的 ATX12V 電源接頭，並確定連接妥當。

BIOS 的設定

當您將所有的硬體安裝完畢以後，就可以開啓電腦的電源並進入 BIOS 的選項。如您想要瞭解相關且更爲詳細的資訊，請參閱我們的完整版使用手冊，裡面會有詳盡的說明。

ールガイド

アルの完全版を参照してください。この
者向けに書かれました。今回始めてコン
のマニュアルをお読みになるか、専門技
行うようお勧めします。（完全なユーザ
とユーティリティ CD を検索して入手

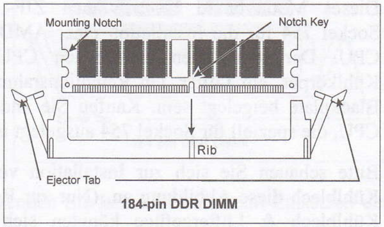


注意：正しいバス周波数と倍数をプロセッサ用に設定するのを忘れないでください。

マザーボードをシャーシに取り付ける

マザーボードにプロセッサを取り付けた後、シャーシにマザーボードを固定することができるようになります。まず、シャーシにマザーボードを固定する必要があります。ほとんどのコンピュータシャーシには、多くの取り付け穴の付いた台が付属しており、それを使用することでマザーボードをしっかり取り付けたり、同時にショートを避けることができます。シャーシに付属する飾りボタンかスペーサーを使用してマザーボードを固定します。

RAM モジュールの取り付け



184-pin DDR DIMM

1. ボードの DIMM スロットを探します。
2. DIMM モジュールの 2 つのエッジがそのコネクタに触れないように、注意して持ちます。
3. モジュールのノッチキーをスロットのリブに合わせます。
4. モジュールをスロットにしっかり押し込むと、スロットの両側にあるイジェクタタブが取り付けノッチにかちっと音を立てて自動的にはめ込まれます。DIMM モジュールに余分な力をかけないでください。DIMM モジュールは一方向にしかフィットしません。
5. DIMM モジュールは、スロットの 2 つのイジェクタタブを外側に同時に引っ張ると外れます。

注意：静電気はコンピュータやオプションのボードの電気コンポーネントを損傷させることがあります。これらの手順を開始する前に、アースされた金属物体に軽く触れて静電気を必ず放電してください。

コネクタ、ヘッダ、スイッチおよびアダプタ

コンピュータのケース内部には、複数のケーブルやプラグを接続できます。これらのケーブルやプラグは、通常マザーボードにあるコネクタに 1 つずつ接続されます。ケーブルの接続方向には十分な注意を払い、また必要に応じ、コネクタの第 1 ピンの位置にも注目する必要があります。SCSI アダプタ、AGP アダプタのような特殊なニーズ向けには、それに対応したアダプタを取り付けてください。アダプタをマザーボードのスロットに取り付けたら、ネジでシャーシの背面パネルに固定してください。

詳細については、ユーザーズマニュアルの完全版を参照してください。

電源コネクタを ATX12V 電源コネクタに差し込む

電源装置から出ている電源ブロックコネクタをこの ATX12V 電源に接続します。コネクタが十分奥まで装着されていることをご確認ください。

BIOS のセットアップ

ハードウェアの取り付けが完了したら、コンピュータの電源をオンにし、BIOS Setup アイテムに移動して、プロセッサのパラメータをセットアップします。詳細については、ユーザーズマニュアルの完全版を参照してください。

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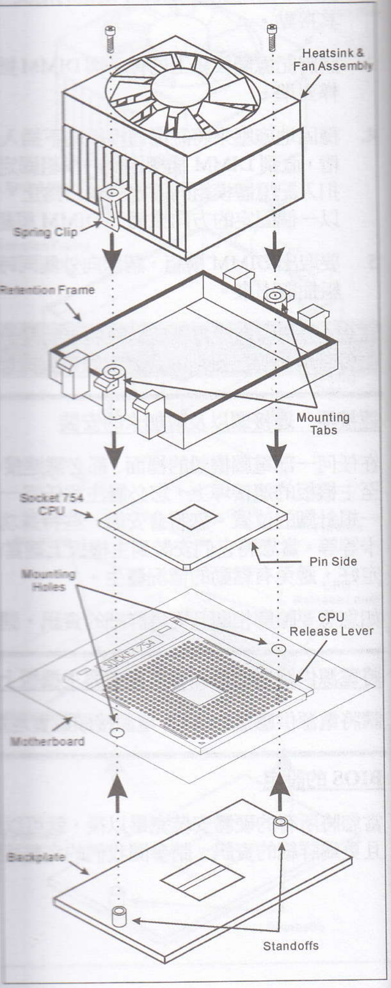

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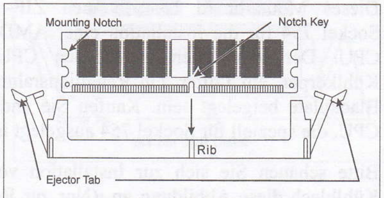

184-pin DDR DIMM

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詳細については、ユーザーズマニュアルの完全版を参照してください。

電源コネクタを ATX12V 電源コネクタに差し込む

電源装置から出ている電源ブロックコネクタをこの ATX12V 電源に接続します。コネクタが十分奥まで装着されていることをご確認ください。

BIOS のセットアップ

ハードウェアの取り付けが完了したら、コンピュータの電源をオンにし、BIOS Setup アイテムに移動して、プロセッサのパラメータをセットアップします。詳細については、ユーザーズマニュアルの完全版を参照してください。

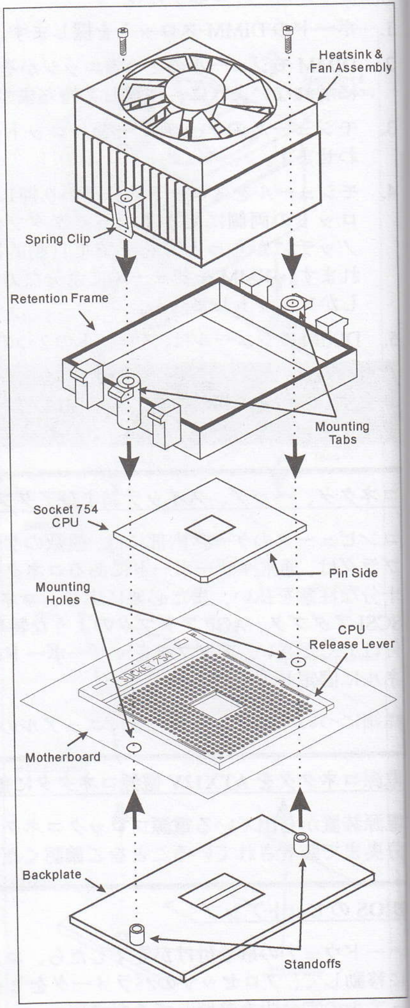
KV8-MAX3 Schnellinstallationsanleitung

Beziehen Sie sich bitte für detaillierte Informationen über diese Hauptplatine auf die vollständige Version des Benutzerbuchs. Diese Schnellinstallationsanleitung ist für erfahrene Systemaufbauer gedacht. Ist es Ihr erster Versuch ein Computersystem aufzubauen, dann empfehlen wir Ihnen zuerst das vollständige Benutzerhandbuch zu lesen oder einen Techniker zum Aufbauen des Systems zu Hilfe zu holen. (Ein komplettes Handbuch finden Sie auf der CD mit den Treibern und Hilfsprogrammen, die diesem Motherboard beiliegt.)

Installieren des Prozessors

Dieses Motherboard besitzt einen ZIF- (Nullkraft-) Sockel 754 für die Installation einer AMD Sockel 754 CPU. Der von Ihnen erworbenen CPU sollte ein Kühlkörper, ein Lüfter, ein Retentionsrahmen und eine Blackplate beigelegt sein. Kaufen Sie andernfalls eine CPU, die speziell für Sockel 754 ausgelegt ist.

Bitte schauen Sie sich zur Installation von CPU und Kühlblech diese Abbildung an. (Nur zur Referenz - Ihr Kühlblech & Lüftergefüge könnten sich von dieser Abbildung unterscheiden.)



1. Finden Sie den Sockel 754 auf diesem Motherboard. Ziehen Sie den CPU-Freigabehebel zur Entriegelung zur Seite und ziehen Sie ihn dann ganz hoch.
2. Stecken Sie den Prozessor mit der Stiftseite nach unten in den CPU-Sockel. Stecken Sie die CPU nicht gewaltsam hinein; sie passt nur in eine Richtung. Schließen Sie den CPU-Freigabehebel.
3. Richten Sie die Backplate-Distanzstifte mit den Montagelöcher des Motherboards aus. Setzen Sie die Backplate auf das Motherboard.
4. Legen Sie den Retentionsrahmen auf das Motherboard und richten Sie ihn mit den Backplate-Distanzstiften aus.
5. Setzen Sie den Kühlkörper auf die CPU, wobei Sie darauf achten müssen, dass er gut auf den Retentionsrahmen passt.
6. Haken Sie beide Seiten der Federklemme in die Montagezapfen des Retentionsrahmens ein. Ziehen Sie die Schrauben fest an, bis die Federklemme komplett angebracht ist.
7. Befestigen Sie den Lüfteranschluss des Kühlkörpers und des Lüftersets am CPU-LÜFTER-Anschluss auf dem Motherboard.

Achtung: Vergessen Sie nicht, die korrekte Busfrequenz und -Multiplikator für Ihren Prozessor einzustellen.

Installieren der Hauptplatine im Gehäuse

Nach der Installation des Prozessors können S
befestigen. Die meisten Gehäuse haben eine Bod
befinden, mit deren Hilfe Sie die Hauptplatine
verhindern. Verwenden Sie entweder die Dübel
Bodenplatte des Gehäuses zu befestigen.

Installation der RAM-Module

1. Finden Sie den DIMM-Steckplatz auf dem B
2. Halten Sie ie beiden Ränder des DIMM
vorsichtig fest, wobei Sie darauf achten,
Anschlüsse zu berühren.
3. Richten Sie die Nut am Modul mit der Erh
Steckplatz aus.
4. Drücken Sie das Modul fest in die Steckplät
Auswurflaschen zu beiden Seiten des Ste
automatisch in die Befestigungskerbe einsch
DIMM-Moduls an; es paßt nur in eine Richtu
5. Zum Ausbau der Module drücken Sie die b
zusammen und ziehen das Modul heraus.

Anschlüsse, Sockel, Schalter und Adapter

Im Inneren des Gehäuses findet man in jedem
werden müssen. Diese Kabel und Stecker werde
Hauptplatine verbunden. Sie müssen genau auf
vorhanden, sich die Position des ersten Pols d
SCSI-Adapter, AGP-Adapter usw. installieren,
Schrauben auf die Rückseite des Computergehäus

Für detaillierte Informationen beziehen Sie sich b

Verbinden der Netzstecker mit dem ATX12V-

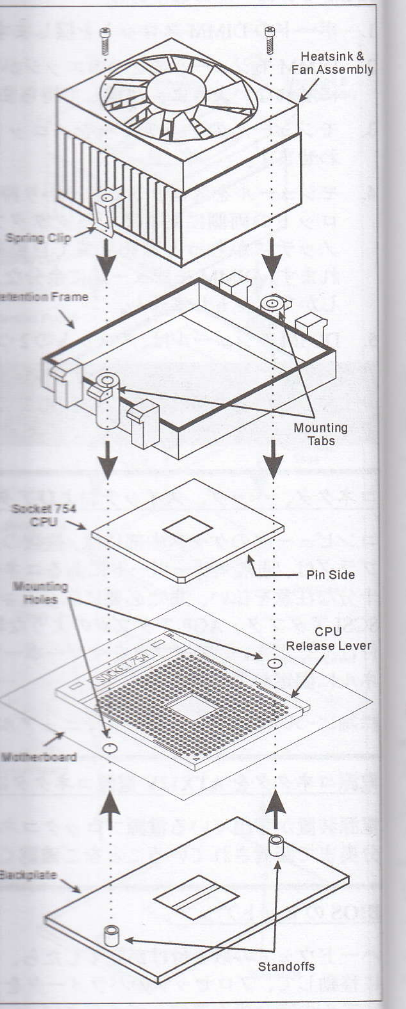
Denken Sie daran, den Anschluss des ATX-Netz
drücken, um eine feste Verbindung zu garantieren

BIOS-Setup

Schalten Sie nach der vervollständigten Hardware
BIOS, um die Prozessorparameter einzustellen. F
das vollständige Benutzerhandbuch.

nleitung

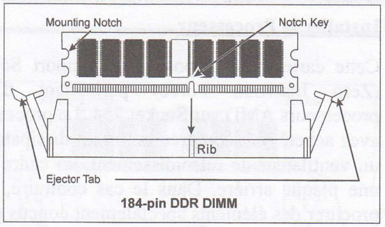
se Hauptplatine auf die vollständige Version
r erfahrene Systemaufbauer gedacht. Ist es
mpfehlen wir Ihnen zuerst das vollständige
bauen des Systems zu Hilfe zu holen. (Ein
reibern und Hilfsprogrammen, die diesem



Installieren der Hauptplatine im Gehäuse

Nach der Installation des Prozessors können Sie anfangen die Hauptplatine im Computergehäuse zu befestigen. Die meisten Gehäuse haben eine Bodenplatte, auf der sich eine Reihe von Befestigungslöcher befinden, mit deren Hilfe Sie die Hauptplatine sicher verankern können und zugleich Kurzschlüsse verhindern. Verwenden Sie entweder die Dübeln oder die Abstandhalter, um die Hauptplatine auf der Bodenplatte des Gehäuses zu befestigen.

Installation der RAM-Module



1. Finden Sie den DIMM-Steckplatz auf dem Board.
2. Halten Sie ie beiden Ränder des DIMM-Moduls vorsichtig fest, wobei Sie darauf achten, nicht die Anschlüsse zu berühren.
3. Richten Sie die Nut am Modul mit der Erhöhung am Steckplatz aus.
4. Drücken Sie das Modul fest in die Steckplätze, bis die Auswurflaschen zu beiden Seiten des Steckplatzes automatisch in die Befestigungskerbe einschnappen. Wenden Sie keine Gewalt beim Einsetzen des DIMM-Moduls an; es paßt nur in eine Richtung hinein.
5. Zum Ausbau der Module drücken Sie die beiden Auswurflaschen auf dem Steckplatz nach außen zusammen und ziehen das Modul heraus.

Anschlüsse, Sockel, Schalter und Adapter

Im Inneren des Gehäuses findet man in jedem Computer viele Kabel und Stecker, die angeschlossen werden müssen. Diese Kabel und Stecker werden normalerweise einzeln mit den Anschlüssen auf der Hauptplatine verbunden. Sie müssen genau auf die Anschlussorientierung der Kabel achten und, wenn vorhanden, sich die Position des ersten Pols des Anschlusses merken. Wenn Sie Adapter wie z.B. SCSI-Adapter, AGP-Adapter usw. installieren, befestigen Sie bitte die Adapter immer mit Hilfe der Schrauben auf die Rückseite des Computergehäuses.

Für detaillierte Informationen beziehen Sie sich bitte auf das vollständige Benutzerhandbuch.

Verbinden der Netzstecker mit dem ATX12V-Anschluss

Denken Sie daran, den Anschluss des ATX-Netzteils fest in das Ende mit dem ATX12V-Anschluss zu drücken, um eine feste Verbindung zu garantieren.

BIOS-Setup

Schalten Sie nach der vervollständigten Hardwareinstallation den Computer ein und gehen zur Option im BIOS, um die Prozessorparameter einzustellen. Für detaillierte Informationen beziehen Sie sich bitte auf das vollständige Benutzerhandbuch.

KV8-MAX3 Guide d'Installation Rapide

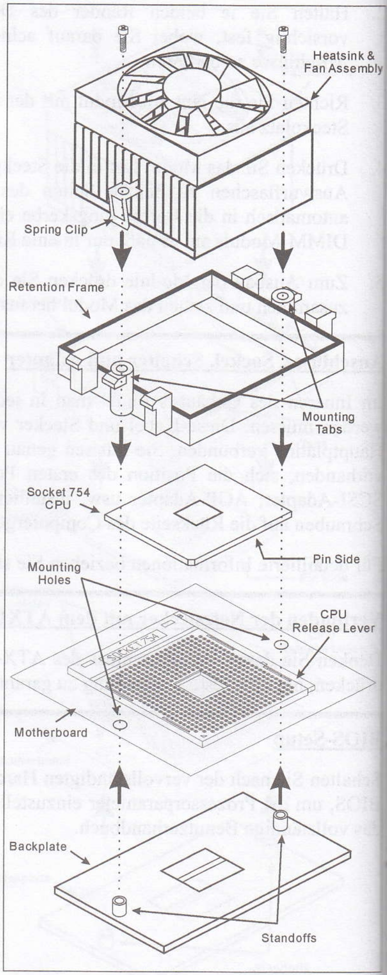
Pour des informations relatives à cette carte mère plus détaillées, veuillez vous référer à notre version complète du manuel utilisateur. Ce guide d'installation rapide est créé pour les assembleurs système expérimentés. S'il s'agit de votre premier essai pour installer un ordinateur, nous vous suggérons de lire d'abord le manuel en version complète ou de demander l'aide d'un technicien pour vous aider à configurer le système ordinateur. (Un manuel de l'utilisateur complet est disponible en naviguant dans le CD des pilotes et utilitaires fournis avec la carte mère.)

Installer le Processeur

Cette carte mère dispose d'un support Socket 754 ZIF (Zero Insertion Force) permettant d'installer les processeurs AMD sur Socket 754. Le processeur que vous avez acheté doit comprendre un kit dissipateur thermique, un ventilateur de refroidissement, un cadre de support et une plaque arrière. Dans le cas contraire, veuillez vous procurer des éléments spécialement conçus pour le Socket 754.

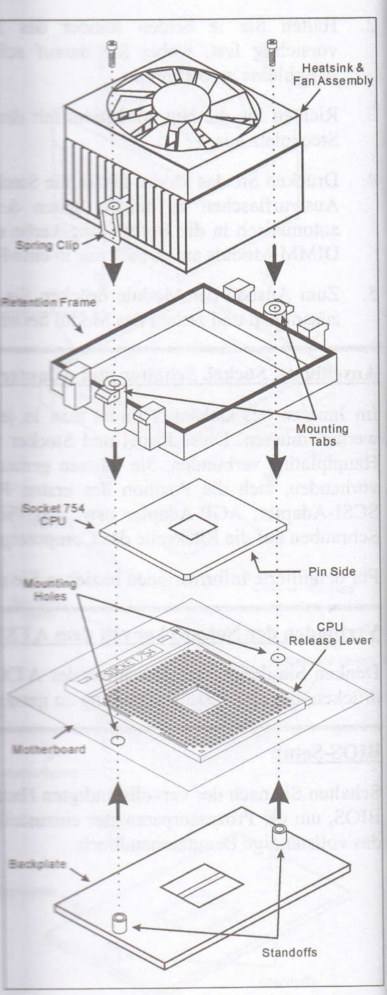
Veuillez vous référer à la figure illustrée ci-contre pour installer le processeur et le dissipateur thermique. (Démonstration donnée à titre indicatif uniquement. L'assemblage de votre dissipateur thermique et de votre ventilateur peut ne pas être tout à fait identique à celui-ci.)

1. Repérez le support Socket 754 situé sur cette carte mère. Tirez le levier de maintien du processeur vers l'extérieur pour le libérer puis soulevez-le complètement vers le haut.
2. Installez le processeur avec ses broches faisant face au support pour processeur. Ne forcez pas en insérant le processeur; il ne peut s'insérer que dans une seule direction. Rabattez le levier de maintien du processeur.
3. Alignez les entretoises situées sur la plaque arrière avec les trous de montage se trouvant sur la carte mère. Mettez la plaque arrière en place sur la carte mère.
4. Mettez le cadre de support sur la carte mère et alignez-le avec les entretoises de la plaque arrière.
5. Installez le dissipateur thermique sur le dessus du processeur et assurez-vous qu'il s'insère correctement sur le cadre de support.
6. Accrochez les deux côtés de la bride de fixation sur les onglets de fixation du cadre de support. Serrez les vis jusqu'à ce que les deux côtés de la bride de fixation soient complètement bloqués.
7. Connectez le connecteur ventilateur de l'assemblage Dissipateur Thermique et Ventilateur au connecteur ventilateur pour processeur situé sur la carte mère.



Rapide

illées, veuillez vous référer à notre version ide est créé pour les assembleurs système un ordinateur, nous vous suggérons de lire l'aide d'un technicien pour vous aider à complet est disponible en naviguant dans le

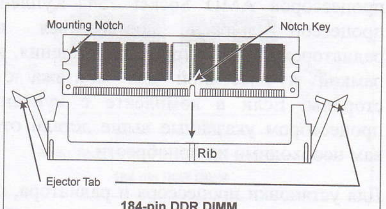


Attention: N'oubliez pas de programmer la fréquence de bus correcte et le multiple pour votre processeur.

Installer la Carte Mre dans le Châssis

Une fois que vous aurez installé le processeur sur la carte mère, vous pourrez commencer à fixer la carte mère sur le châssis. Tout d'abord, vous avez besoin de fixer la carte mère sur le châssis. La plupart des châssis d'ordinateur possèdent une base sur laquelle il y a nombreux trous de montage permettant à la carte mère d'être fixée fermement, et en même temps d'éviter les court-circuits. Utilisez les talons ou les entretoises fixés sur le châssis pour fixer la carte mère.

Installer des Modules RAM



184-pin DDR DIMM

1. Localisez le socle DIMM sur la carte.
2. Maintenez les deux bords du module DIMM avec précaution, en évitant de toucher ses connecteurs.
3. Alignez la touche du cran avec la ligne sur le socle.
4. Pressez fermement le module dans les socles jusqu'à ce que les languettes d'éjection sur les deux côtés du socle aillent automatiquement dans le cran de montage. Ne forcez pas à l'excès sur le module DIMM car celui-ci ne peut aller que selon une seule orientation.
5. Pour enlever des modules DIMM, pressez simultanément les deux languettes d'éjection sur le socle, puis sortez le module DIMM.

Attention: L'électricité statique risque d'endommager les composants électroniques de l'ordinateur ou des cartes optionnelles. Avant de commencer ces procédures, assurez-vous de bien décharger toute l'électricité statique en touchant rapidement un objet métallique relié au sol.

Connecteurs, Socles de connexion, Interrupteurs et Adaptateurs

A l'intérieur du boîtier de n'importe quel ordinateur il y a plusieurs câbles et prises qui doivent être connectés. Ces câbles et prises sont habituellement connectés les uns après les autres aux connecteurs situés sur la carte mère. Vous avez besoin de faire attention au sens de connexion des câbles et, s'il y a lieu, remarquez la position de la première broche du connecteur. Vous installerez certains adaptateurs pour des besoins spéciaux, tels adaptateurs SCSI, adaptateurs AGP, etc. Lorsque vous les installez dans les emplacements situés sur la carte mère, veuillez les fixer sur le panneau arrière du châssis à l'aide des vis.

Pour les informations détaillées, veuillez vous référer au manuel utilisateur en version complète.

Brancher les connecteurs d'alimentation dans les connecteurs ATX12V

Souvenez-vous que vous devez pousser le connecteur de votre alimentation fermement dans le connecteur ATX12V pour assurer une bonne connexion.

Configuration du BIOS

Une fois le matériel installé complètement, démarrez l'ordinateur et allez sur l'item dans le BIOS pour configurer les paramètres du processeur. Pour les informations détaillées, veuillez vous référer à la version complète du manuel utilisateur.

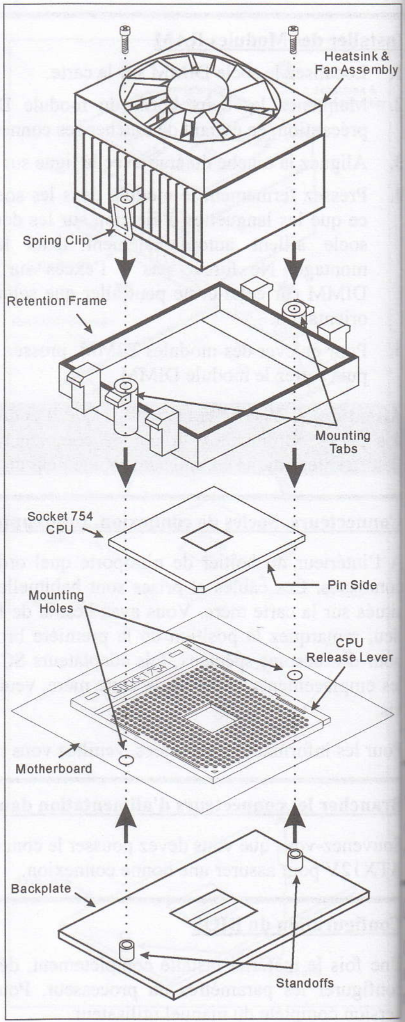
Краткое руководство по установке KV8-MAX3

Более подробные сведения о материнской плате приведены в руководстве пользователя. Краткое руководство по установке предназначено для опытных специалистов. Если вы собираете компьютер впервые, ознакомьтесь сперва с руководством пользователя или попросите техника помочь в настройке компьютерной системы.

Установка процессора

Данная системная плата снабжена разъёмом Socket 754 ZIF (нулевое усилие вставки) для установки процессоров AMD Socket 754. Купленный вами процессор должен поставляться вместе с радиатором, вентилятором охлаждения, монтажной рамкой и пластиной для монтажа с обратной стороны. Если в комплекте с купленным вами процессором указанные выше детали отсутствуют, вам необходимо их приобрести.

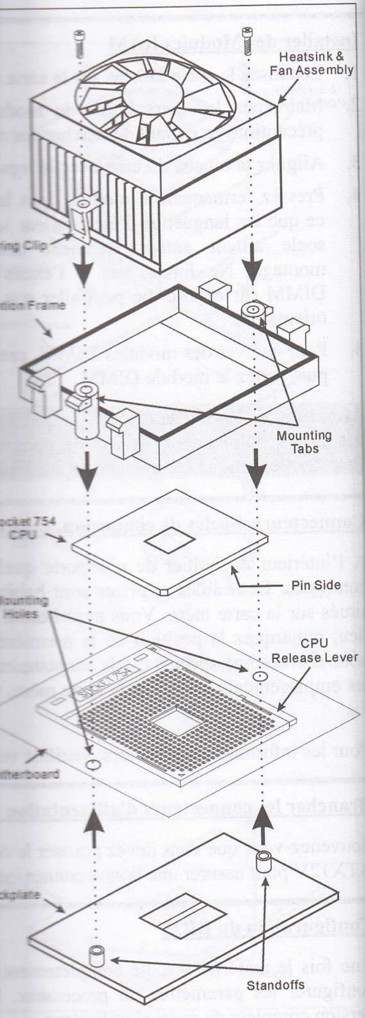
Для установки процессора и радиатора, посмотрите пожалуйста на рисунок, показанный на этой странице. (Только для справочной работы. Ваш радиатор и комплект вентилятора может быть не точно такой же как показанный рисунок здесь.)



1. Найдите на системной плате разъём Socket 754. Потяните рычаг деблокировки процессора в сторону и наверх.
2. Вставьте выводы процессора в гнёзда разъёма. Не прилагайте излишних усилий! Процессор вставляется только в одном положении. Заблокируйте процессор при помощи рычага деблокировки процессора.
3. Сопоставьте ограничительные выступы на монтажной пластине с отверстиями в системной плате. Пластина должна размещаться под системной платой.
4. Положите монтажную рамку на системную плату. Проверьте соответствие монтажных отверстий платы и пластины с обратной стороны системной платы.
5. Установите радиатор на поверхность процессора. Радиатор должен плотно входить в монтажную рамку.
6. Зацепите пружинный держатель радиатора за выступы, расположенные на монтажной рамке. Затягивайте винты, пока пружинный держатель не зафиксируется.
7. Вывод вентилятора охлаждения подключите к разъёму на системной плате, предназначенному для системы охлаждения процессора.

ке KV8-MAX3

в руководстве пользователя. Краткое специалистов. Если вы собираете пользователя или попросите техника

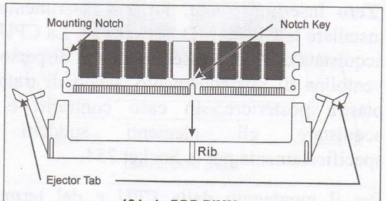


Внимание: Установите соответствующие частоту и кратность шины процессора.

Установка материнской платы в корпус

После установки процессора на материнскую плату можно начинать установку материнской платы в корпус. Большая часть корпусов оборудована основанием, в котором проделаны монтажные отверстия, которые позволяют надежно закрепить материнскую плату и предотвратить короткие замыкания. Для крепления материнской платы к основанию используются винты и прокладки.

Установка модулей памяти



184-pin DDR DIMM

1. Найдите на системной плате разъем для модулей памяти DIMM.
2. Аккуратно, за два конца, возьмите модуль памяти, не касаясь контактов.
3. Совместите выемку в модуле памяти с выступом в разъеме.
4. Нажмите на модуль так, чтобы лепестки выталкивателя с обеих сторон разъема автоматически защелкнулись и вошли в пазы. Не применяйте при установке излишнюю силу. Модуль входит в разъем только в одном положении.
5. Для извлечения модулей памяти DIMM одновременно нажмите на лепестки выталкивателя и вытащите модуль.

Внимание: Статическое электричество может стать причиной выхода из строя электронных компонентов компьютера. Перед началом данной процедуры снимите с себя статический заряд, прикоснувшись заземленного металлического предмета.

Разъемы, переключатели и адаптеры

Внутри корпуса компьютера необходимо расположены несколько кабелей и вилок, которые необходимо подключить. Обычно эти кабели подключаются к разъемам, расположенным на материнской плате. При подключении любого кабеля необходимо обращать внимание на расположение первого контакта разъема. Для особых целей могут потребоваться специальные адаптеры, например, адаптер SCSI, адаптер AGP и т.п.. При установке адаптеров в гнезда материнской платы закрепите их на задней панели с помощью винтов.

За более подробной информацией обращайтесь к полному руководству пользователя.

Подключение кабелей питания к разъемам ATX12V

Обратите внимание, разъем блока питания ATX необходимо вставить в разъем ATX12V до упора, чтобы обеспечить надежное соединение.

Настройка BIOS

По окончании установки аппаратуры включите питание и перейдите в меню BIOS Setup, чтобы настроить параметры процессора. За более подробной информацией обращайтесь к руководству пользователя.

Guida all'installazione veloce Scheda madre KV8-MAX3

Per maggiori e dettagliate informazioni su questa scheda madre si prega di fare riferimento alla versione integrale del Manuale utente. Questa guida all'installazione veloce è intesa per costruttori esperti di sistemi. Se questa è la prima volta che si cerca di installare un sistema, si consiglia di leggere, innanzi tutto, la versione integrale del manuale oppure di chiedere aiuto ad un tecnico per l'installazione.

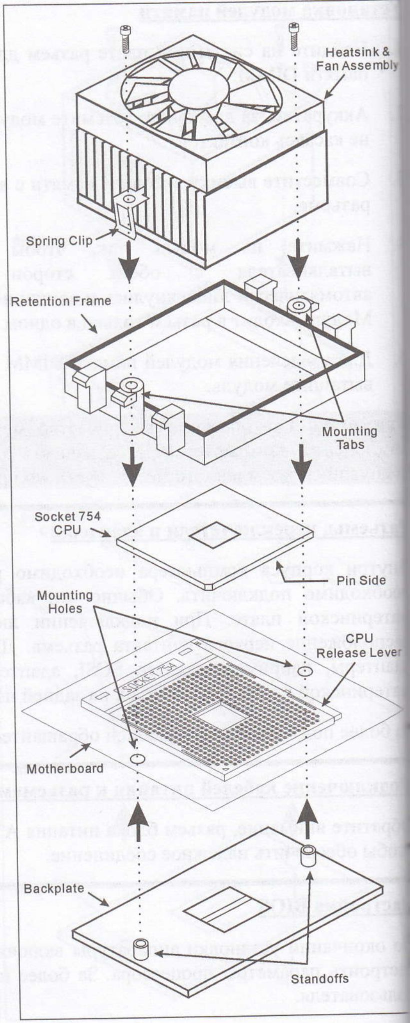
Installazione del processore

Questa scheda madre fornisce una presa Socket 754 ZIF (Zero Insertion Force: forza d'inserimento zero) per installare la CPU AMD Socket 754. La CPU che è stata acquistata dovrebbe essere dotata di dispersore di colare, ventolina di raffreddamento, telaio di trattenimento e piastra posteriore. In caso contrario è necessario acquistare gli elementi suddetti progettati specificatamente per la Socket 754.

Per il montaggio della CPU e del termodispersore, consultare la figura accanto. Si noti che il gruppo termodispersore-ventola illustrati possono non essere identici a quelli effettivamente da montare.

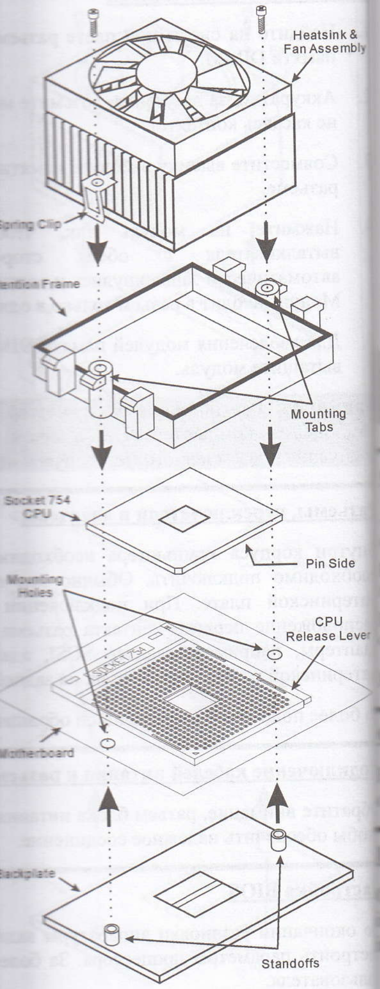
1. Ubicare la presa 754 sulla scheda madre. Tirare la levetta di rilascio della CPU verso l'esterno per sbloccare la CPU, poi sollevarla completamente.
2. Lasciare cadere il processore, con i pin rivolti verso il basso, nella presa CPU. Non sforzare per inserire la CPU perché si adatta solamente in una posizione. Chiudere la levetta di rilascio CPU.
3. Allineare i fermi della piastra posteriore con i fori di montaggio sulla scheda madre. Porre la piastra sulla scheda madre.
4. Porre il telaio di trattenimento sulla scheda madre ed allinearlo con i fermi della piastra.
5. Porre il disperso di calore sopra la CPU ed assicurarsi che si adatti in modo appropriato sul telaio di trattenimento.
6. Agganciare entrambi i lati del fermaglio a molla sui supporti di montaggio del telaio di trattenimento. Stringere le viti finché il fermaglio a molla è installato completamente.
7. Attaccare il connettore del gruppo dispersore di calore e ventolina al connettore CPU-FAN sulla scheda madre.

Attenzione: Non dimenticare di impostare la corretta frequenza multipla e BUS per il processore.



da madre KV8-MAX3

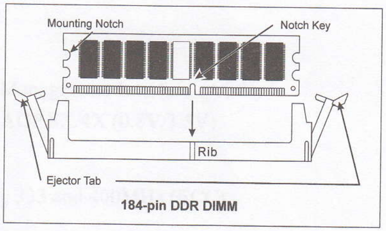
re si prega di fare riferimento alla versione veloce è intesa per costruttori esperti di n sistema, si consiglia di leggere, innanzi o ad un tecnico per l'installazione.



Installazione della scheda madre sul telaio

Dopo avere installato il processore sulla scheda madre si può iniziare a fissare la scheda madre sul telaio. Innanzi tutto è necessario fissare la scheda madre al telaio. La maggior parte dei telai ha una base sulla quale sono presenti diversi fori di montaggio che permettono di fissare in modo accurato la scheda madre e, allo stesso tempo, di prevenire corto circuiti. Impiegare le borchie o gli spaziatori attaccati al telaio per fissare la scheda madre.

Installare i moduli RAM



1. Ubicare gli alloggiamenti DIMM sulla scheda.
2. Tenere con delicatezza i lati del modulo DIMM senza toccare i connettori.
3. Allineare la tacca sul modulo con la nervatura dell'alloggiamento.
4. Premere con fermezza il modulo nell'alloggiamento finché le linguette d'espulsione su entrambi i lati dell'alloggiamento scattano sulla tacca di montaggio. Non forzare eccessivamente il modulo DIMM perché quest'ultimo si adatta solamente in una direzione.
5. Per rimuovere i moduli DIMM spingere contemporaneamente le due linguette d'espulsione sull'alloggiamento, poi estrarre il modulo DIMM.

Attenzione: L'elettricità statica può danneggiare i componenti elettronici del computer o delle schede. Prima di iniziare queste procedure, assicurarsi di avere scaricato completamente l'elettricità statica toccando brevemente un oggetto metallico con massa a terra.

Connettori, collettori, interruttori ed adattatori

All'interno della copertura di ogni computer ci sono diversi cavi e prese che devo essere collegati. Questi cavi e prese sono solitamente collegati uno ad uno ai connettori situati sulla scheda madre. E' necessario prestare particolare attenzione a qualunque orientamento del collegamento che possono avere i cavi e, se necessario, notare la posizione del primo pin del connettore. Si installeranno alcuni adattatori per particolari necessità quali l'adattatore SCSI, AGP, eccetera. Quando si installano gli adattatori sugli slot della scheda madre, si ricorda di fissarli con le viti anche sul pannello posteriore del telaio.

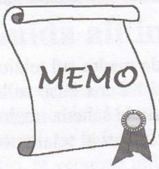
Per informazioni dettagliate si prega di fare riferimento alla versione integrale del Manuale utente.

Collegamento dei connettori d'alimentazione ai connettori ATX12V

Ricordarsi che è necessario spingere con fermezza fino in fondo il connettore della sorgente d'alimentazione ATX al connettore ATX12V, assicurando così un buon collegamento.

Impostazione BIOS

Quando l'hardware è stato installato completamente, accendere il computer ed andare alla voce BIOS per impostare i parametri del processore. Per informazioni dettagliate si prega di fare riferimento alla versione integrale del Manuale utente.



Chapter 1. Introduction

1-1. Features & Specifications

1. **CPU**
    - Supports AMD Socket 754 Athlon 64
2. **Chipset**
    - VIA K8T800 + VT8237
    - Supports Advanced Configuration and
    - Accelerated Graphics Port connector
3. **Memory**
    - 72-bit memory controller supports DD
    - Support 3 DIMM up to 2GB Max.
    - Support 3 DIMM DDR 333
    - Support 2 DIMM DDR 400
4. **SATA**
    - Supports SATA data transfer rates at 1
5. **2nd SATA RAID**
    - On board Serial ATA RAID PCI Cont
    - Supports 4 x SATA 150 RAID 0/1/0+
6. **LAN**
    - On board 10/100/1000M LAN Control
7. **IEEE 1394a**
    - Supports IEEE 1394a at 400/200/100
8. **Audio**
    - Onboard 6-Channel AC 97 CODEC
    - Professional digital audio interface sup
9. **ABIT Engineered**
    - ABIT µGuru™ Technology
    - SoftMenu™ Technology to set CPU pa
    - ABIT FanEQ™ Technology
    - ABIT MaxFID™ Technology
    - CPU ThermalGuard™ Technology
    - TweakGuard™ Technology

Chapter 1. Introduction

1-1. Features & Specifications

1. **CPU**
    - Supports AMD Socket 754 Athlon 64 CPU with 800 MHz FSB
2. **Chipset**
    - VIA K8T800 + VT8237
    - Supports Advanced Configuration and Power Management Interface (ACPI)
    - Accelerated Graphics Port connector supports AGP 8X/4X (0.8V/1.5V)
3. **Memory**
    - 72-bit memory controller supports DDR at 266, 333 and 400MHz (ECC)
    - Support 3 DIMM up to 2GB Max.
    - Support 3 DIMM DDR 333
    - Support 2 DIMM DDR 400
4. **SATA**
    - Supports SATA data transfer rates at 150 MB/s (1.5G bps)
5. **2nd SATA RAID**
    - On board Serial ATA RAID PCI Controller
    - Supports 4 x SATA 150 RAID 0/1/0+1
6. **LAN**
    - On board 10/100/1000M LAN Controller
7. **IEEE 1394a**
    - Supports IEEE 1394a at 400/200/100 Mb/s transfer rate
8. **Audio**
    - Onboard 6-Channel AC 97 CODEC
    - Professional digital audio interface supports S/PDIF Input/Output
9. **ABIT Engineered**
    - ABIT µGuru™ Technology
    - SoftMenu™ Technology to set CPU parameters
    - ABIT FanEQ™ Technology
    - ABIT MaxFID™ Technology
    - CPU ThermalGuard™ Technology
    - TweakGuard™ Technology

10. Internal I/O Connectors

- 1x AGP 8X/4X slot
- 5x PCI slots
- 1x floppy port supports up to 2.88MB
- 2x Ultra DMA 133/100/66/33 connectors
- 6x Serial ATA 150 RAID connectors
- 2x USB headers
- 2x IEEE 1394a headers
- 1x CD-IN, 1x AUX-IN header

11. Back Panel I/O

- 1x PS/2 keyboard, 1x PS/2 mouse
- 1x S/PDIF In connector
- 1x S/PDIF Out connector
- AUDIO1 connector (Rear-Left / Rear-Right, Center/Subwoofer)
- AUDIO2 connector (Mic-In, Line-In, Front-Left/Front-Right)
- 2x USB, 1x IEEE 1394a Connector
- 2x USB, 1x RJ-45 LAN Connector

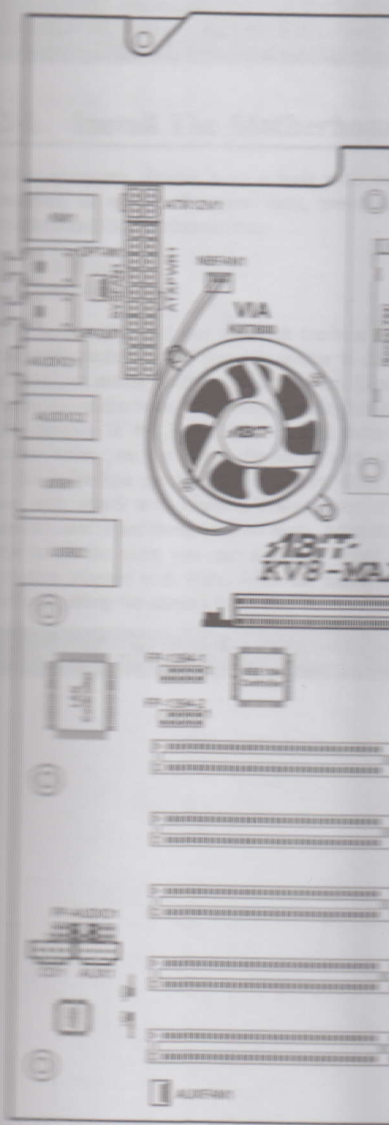
12. Miscellaneous

- ATX form factor
- Hardware Monitoring – Including Fan speed, Voltages, CPU and system temperature

❋ **Supports Wake On LAN, Modem, but your ATX power supply 5V standby power must be able to provide at least a 720mA current capacity. Otherwise, the functions may not work normally.**

❋ **Specifications and information contained herein are subject to change without notice.**

1-2. Layout Diagram



enter/Subwoofer)

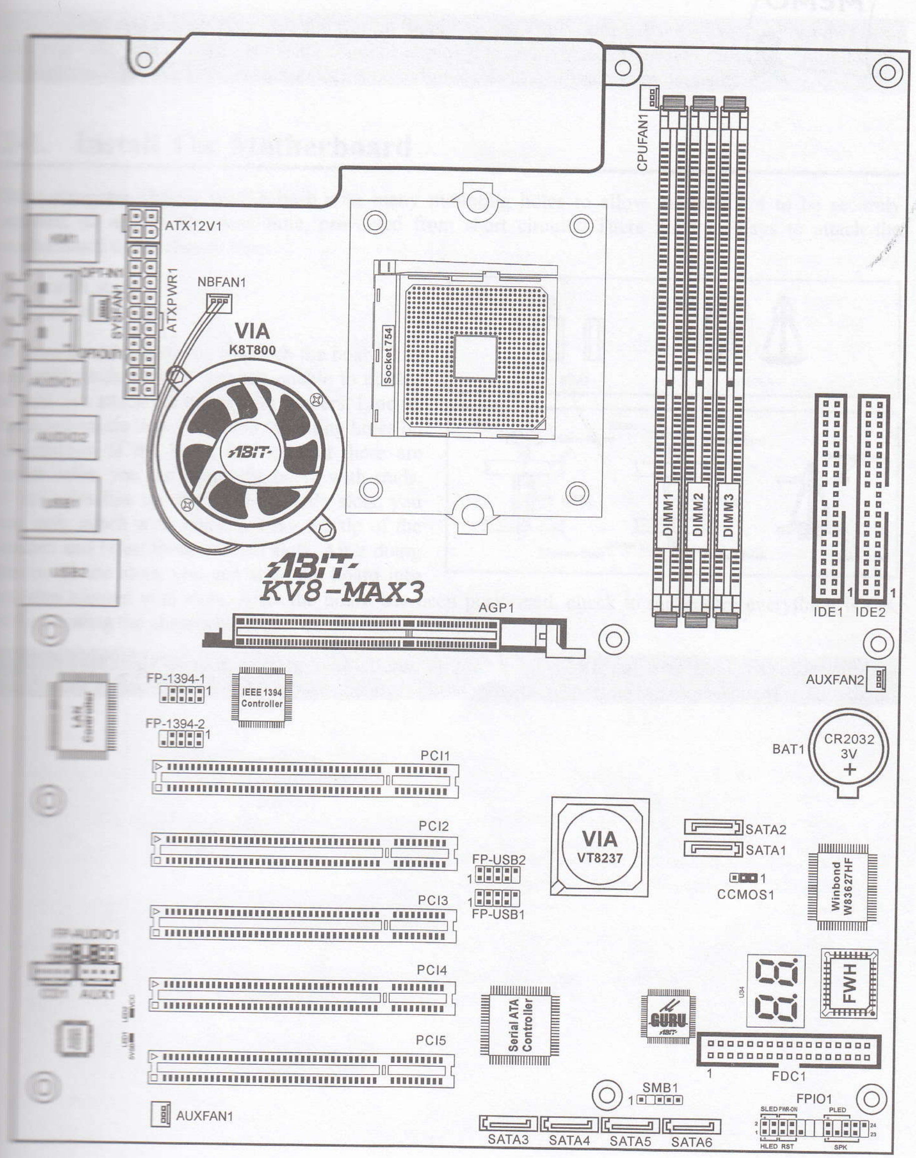
eft/Front-Right)

Voltages, CPU and system temperature

power supply 5V standby power must be ty. Otherwise, the functions may not work

re subject to change without notice.

1-2. Layout Diagram



Chapter 2. Hardware Setup

Before the Installation: Turn off the power supply sw disconnect the power cord before installing or unpluggi may cause the motherboard components or add-on ca

2-1. Install The Motherboard

Most computer chassis have a base with many mount attached on and at the same time, prevented from sh motherboard to the chassis base:

1. use with studs
2. or use with spacers

In principle, the best way to attach the board is to use with studs. Only if you are unable to do this should you attach the board with spacers. Line up the holes on the board with the mounting holes on the chassis. If the holes line up and there are screw holes, you can attach the board with studs. If the holes line up and there are only slots, you can only attach with spacers. Take the tip of the spacers and insert them into the slots. After doing this to all the slots, you can slide the board into position aligned with slots. After the board has been po before putting the chassis back on.

ATTENTION: To prevent shorting the PCB circuit, ple already fastened on the chassis base and are without r

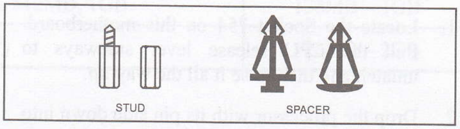
Chapter 2. Hardware Setup

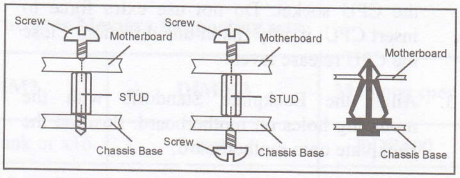
Before the Installation: Turn off the power supply switch (fully turn off the +5V standby power), or disconnect the power cord before installing or unplugging any connectors or add-on cards. Failing to do so may cause the motherboard components or add-on cards to malfunction or damaged.

2-1. Install The Motherboard

Most computer chassis have a base with many mounting holes to allow motherboard to be securely attached on and at the same time, prevented from short circuits. There are two ways to attach the motherboard to the chassis base:

1. use with studs
2. or use with spacers





In principle, the best way to attach the board is to use with studs. Only if you are unable to do this should you attach the board with spacers. Line up the holes on the board with the mounting holes on the chassis. If the holes line up and there are screw holes, you can attach the board with studs. If the holes line up and there are only slots, you can only attach with spacers. Take the tip of the spacers and insert them into the slots. After doing this to all the slots, you can slide the board into position aligned with slots. After the board has been positioned, check to make sure everything is OK before putting the chassis back on.

ATTENTION: To prevent shorting the PCB circuit, please REMOVE the metal studs or spacers if they are already fastened on the chassis base and are without mounting-holes on the motherboard to align with.

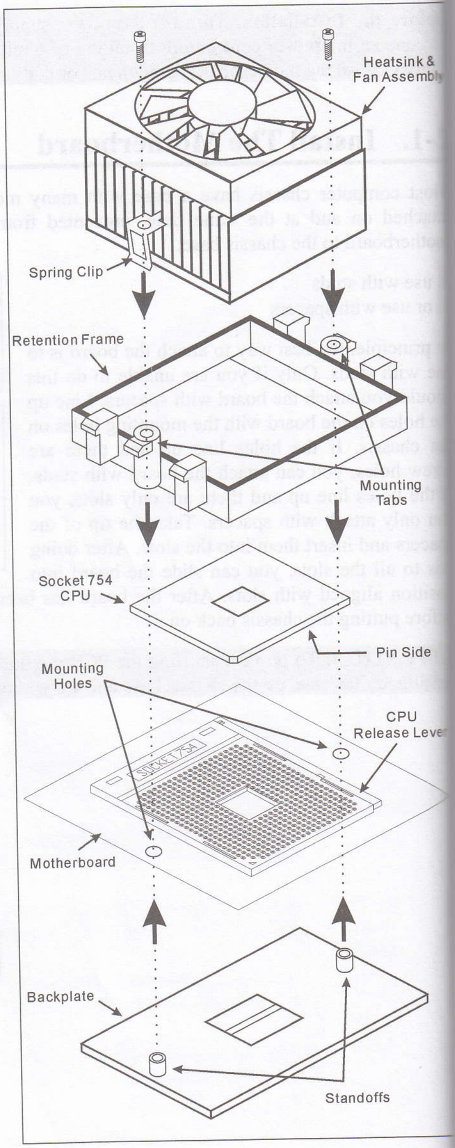
2-2. Install CPU and Heatsink

This motherboard provides a ZIF (Zero Insertion Force) Socket 754 to install AMD Socket 754 CPU. The CPU you bought should contain with a kit of heatsink, cooling fan, retention frame and blackplate. If that's not the case, buy one specially designed for Socket 754.

Please refer to the figure shown here to install CPU and heatsink. (For reference only. Your Heatsink & Fan Assembly may not be exactly the same as this one.)

1. Locate the Socket 754 on this motherboard. Pull the CPU release lever sideways to unlatch and then raise it all the way up.
2. Drop the processor with its pin side down into the CPU socket. Do not use extra force to insert CPU; it only fits in one direction. Close the CPU release lever.
3. Align the Backplate Standoffs with the mounting holes on motherboard. Position the backplate onto motherboard.
4. Place the Retention Frame onto the motherboard and align it with the Backplate Standoffs.
5. Place heatsink on top of CPU, and make sure the heatsink fits properly on the retention frame.
6. Hook both sides of the Spring Clip onto the Mounting Tabs of Retention Frame. Tighten screws until the Spring Clip is fully installed.
7. Attach the fan connector of Heatsink & Fan Assembly with the CPU-FAN connector on the motherboard.

ATTENTION: Do not forget to set the correct bus frequency and multiple for your processor.



2-3. Install System Memory

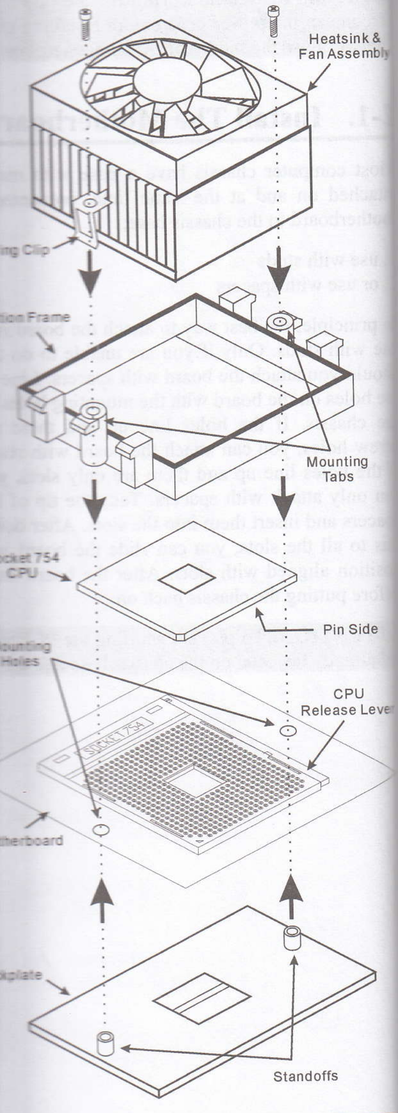
This motherboard provides 3 184-pin DDR DIMM
128MB to maximum 2GB.

Table 2-1. Valid M

Bank	Memo
Bank 0, 1 (DIMM1)	128, 256
Bank 2, 3 (DIMM2)	128, 256
Bank 4, 5 (DIMM3)	128, 256
Total System Memor	

Table 2-2. AMD Athlon 64 Pr

DRAM number	DIMM1	DIM
2	x8 single rank or x16	x8 single r
2	x8 single rank or x16	x8 doub
2	x8 single rank or x16	em
2	x8 single rank or x16	emp
2	x8 double rank	x8 single r
2	x8 double rank	x8 doub
2	x8 double rank	emp
2	empty	x8 single r
3	x8 double rank	x8 single r
3	x8 single rank or x16	x8 single r



2-3. Install System Memory

This motherboard provides 3 184-pin DDR DIMM sites for memory expansion available from minimum 128MB to maximum 2GB.

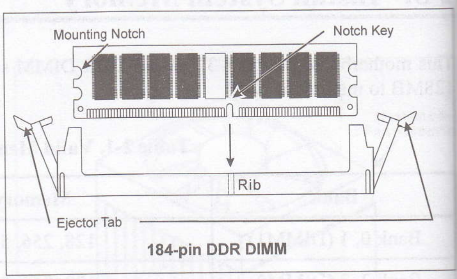
Table 2-1. Valid Memory Configurations

Bank	Memory Module	Total Memory
Bank 0, 1 (DIMM1)	128, 256, 512MB, 1GB	128MB ~ 1GB
Bank 2, 3 (DIMM2)	128, 256, 512MB, 1GB	128MB ~ 1GB
Bank 4, 5 (DIMM3)	128, 256, 512MB, 1GB	128MB ~ 1GB
Total System Memory		128MB ~ 2GB

Table 2-2. AMD Athlon 64 Processor Memory Supporting sets

DRAM number	DIMM1	DIMM2	DIMM3	Memory spec
2	x8 single rank or x16	x8 single rank or x16	empty	DDR400
2	x8 single rank or x16	x8 double rank	empty	DDR400
2	x8 single rank or x16	empty	x8 single rank or x16	DDR400
2	x8 single rank or x16	empty	x8 double rank	DDR400
2	x8 double rank	x8 single rank or x16	empty	DDR400
2	x8 double rank	x8 double rank	empty	DDR400
2	x8 double rank	empty	x8 single rank or x16	DDR400
2	empty	x8 single rank or x16	x8 single rank or x16	DDR333
3	x8 double rank	x8 single rank or x16	x8 single rank or x16	DDR333
3	x8 single rank or x16	x8 single rank or x16	x8 single rank or x16	DDR333

Power off the computer and unplug the AC power cord before installing or removing memory modules.



184-pin DDR DIMM

1. Locate the DIMM slot on the board.
2. Hold two edges of the DIMM module carefully, keep away of touching its connectors.
3. Align the notch key on the module with the rib on the slot.
4. Firmly press the module into the slots until the ejector tabs at both sides of the slot automatically snaps into the mounting notch. Do not force the DIMM module in with extra force as the DIMM module only fit in one direction.
5. To remove the DIMM modules, push the two ejector tabs on the slot outward simultaneously, and then pull out the DIMM module.

ATTENTION: Static electricity can damage the electronic components of the computer or optional boards. Before starting these procedures, ensure that you are discharged of static electricity by touching a grounded metal object briefly.

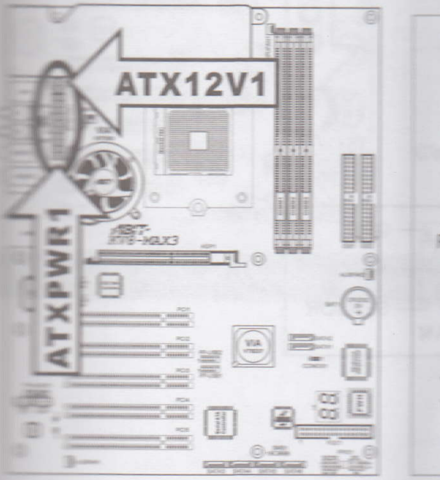
2-4. Connectors, Headers and S

Here we will show you all of the connectors, heade the entire section for necessary information before the computer chassis. A complete enlarged layout connectors and headers on the board that you may r

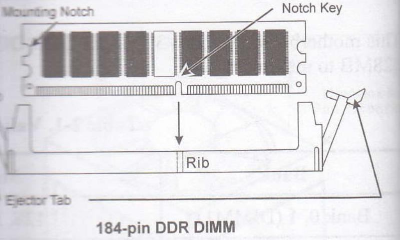
WARNING: Always power off the computer and any peripheral or component. Failing to so may peripherals. Plug in the AC power cord only after y

(1). ATX Power Input Connectors

This motherboard provides two power connectors 20W +5VDC, and 720mA +5VSB capacity at least.



fore installing or removing memory modules.



184-pin DDR DIMM

r tabs on the slot outward simultaneously, and

onic components of the computer or optional are discharged of static electricity by touching a

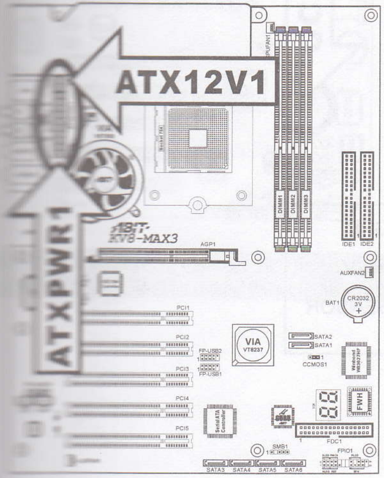
2-4. Connectors, Headers and Switches

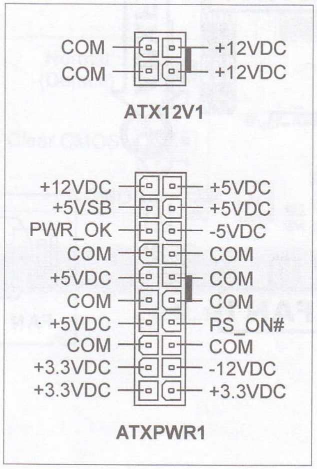
Here we will show you all of the connectors, headers and switches, and how to connect them. Please read the entire section for necessary information before attempting to finish all the hardware installation inside the computer chassis. A complete enlarged layout diagram is shown in Chapter 1 for all the position of connectors and headers on the board that you may refer to.

WARNING: Always power off the computer and unplug the AC power cord before adding or removing any peripheral or component. Failing to so may cause severe damage to your motherboard and/or peripherals. Plug in the AC power cord only after you have carefully checked everything.

(1). ATX Power Input Connectors

This motherboard provides two power connectors to connect to an ATX12V power supply with 300W, 20A +5VDC, and 720mA +5VSB capacity at least.



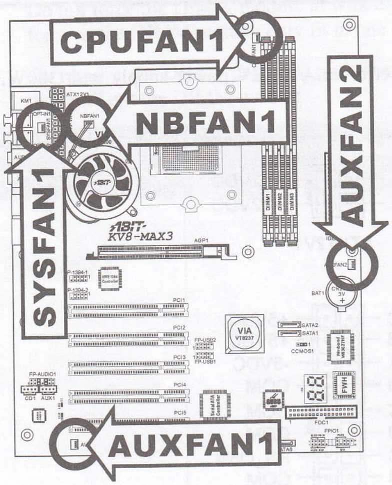


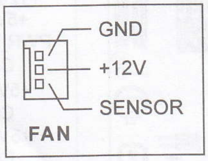
(2). FAN Connectors

These 3-pin connectors each provide power to the cooling fans installed in your system.

- **CPUFAN1:** CPU Fan
- **NBFAN1:** Chipset Fan
- **SYSFAN1:** OTES Fan
- **AUXFAN1, AUXFAN2:** Auxiliary Fan

WARNING: These fan connectors are not jumpers. DO NOT place jumper caps on these connectors.

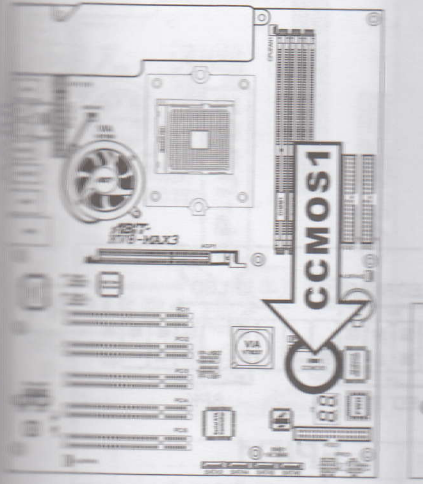




(3). CMOS Memory Clearing Header

This header uses a jumper cap to clear the CMOS

- **Pin 1-2 shorted (default):** Normal oper
- **Pin 2-3 shorted:** Clear CMOS memory.



WARNING: Turn the power off first (including
memory. Failing to do so may cause your system t

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This header uses a jumper cap to clear the CMOS memory.

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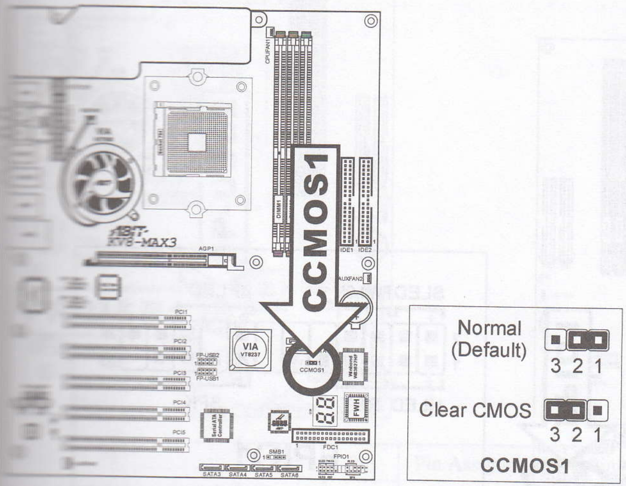
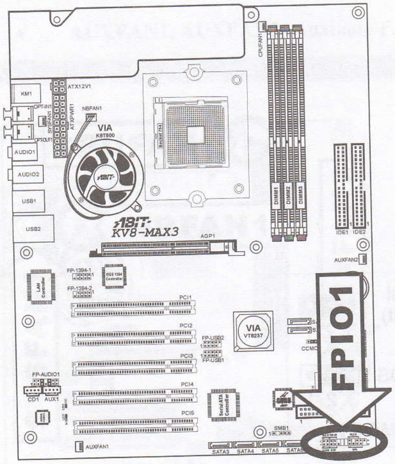


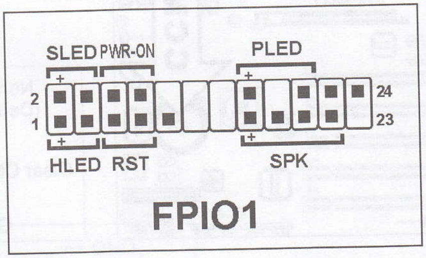
WARNING: Turn the power off first (including the +5V standby power) before clearing the CMOS memory. Failing to do so may cause your system to work abnormally or malfunction.

(4). Front Panel Switches & Indicators Headers

This header is used for connecting switches and LED indicators on the chassis front panel.

Watch the power LED pin position and orientation. The mark "+" align to the pin in the figure belo stands for positive polarity for the LED connection. Please pay attention to connect these headers. A wrong orientation will only cause the LED not lighting, but a wrong connection of the switches coul cause system malfunction.

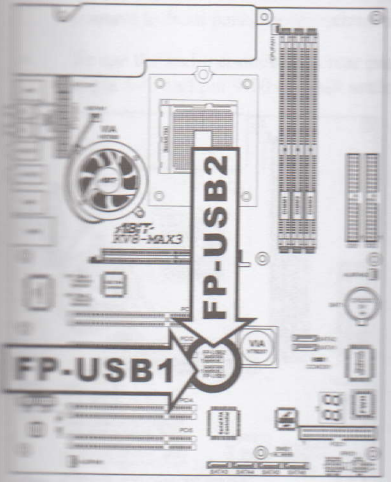


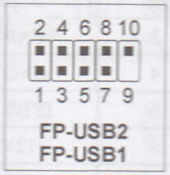


- **HLED (Pin 1, 3):**
  Connects to the HDD LED cable of chassis front panel.
- **RST (Pin 5, 7):**
  Connects to the Reset Switch cable of chassis front panel.
- **SPK (Pin 15, 17, 19, 21):**
  Connects to the System Speaker cable of chassis.
- **SLED (Pin 2, 4):**
  Connects to the Suspend LED cable (if there is one) of chassis front panel.
- **PWR-ON (Pin 6, 8):**
  Connects to the Power Switch cable of chassis front panel.
- **PLED (Pin 16, 18, 20):**
  Connects to the Power LED cable of chassis front panel.

(5). Additional USB Port Headers

These headers each provide 2 additional USB USB 2.0 specifications.

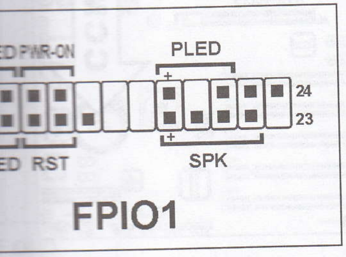




Pin	P
1	
3	
5	
7	
9	

cators on the chassis front panel.

mark "+" align to the pin in the figure below ase pay attention to connect these headers. A but a wrong connection of the switches could



t panel.

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one) of chassis front panel.

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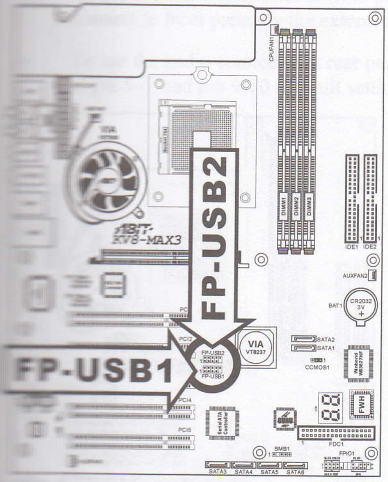
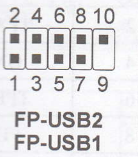
(5). Additional USB Port Headers

These headers each provide 2 additional USB 2.0 ports connection through an USB cable designed for USB 2.0 specifications.

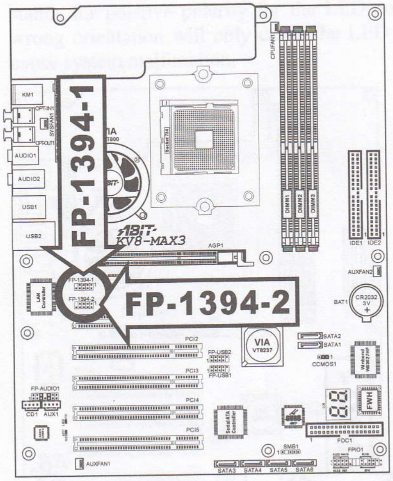


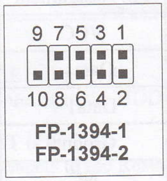


Pin	Pin Assignment	Pin	Pin Assignment
1	VCC	2	VCC
3	Data0 -	4	Data1 -
5	Data0 +	6	Data1 +
7	Ground	8	Ground
9	NC	10	NC

(6). Additional IEEE1394 Port Header

These headers each provide one additional IEEE1394 port connection through an extension cable and bracket.





Pin	Pin Assignment	Pin	Pin Assignment
1	TPA0 +	2	TPA0 -
3	GND	4	GND
5	TPB0 +	6	TPB0 -
7	+12V	8	+12V
9	NC	10	GND

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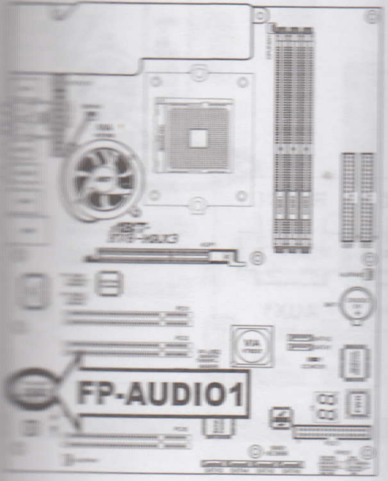
(7). Front Panel Audio Connection Header

This header provides the connection to audio co

- To use the audio connector at front pan connect to front panel by the extension

- To use the audio connector at rear panel at pin 5-6, and pin 9-10 (default setting)



Pin	Pi
1	Audio
3	Audio
5	Speake Channe
7	X
9	Speake Channe
11	Ground
13	VCC

ction through an extension cable and

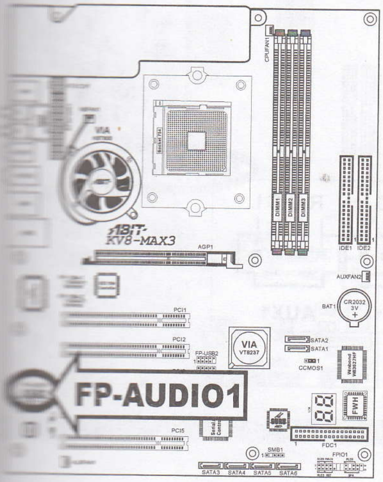
Pin	Pin Assignment
2	TPA0 -
4	GND
6	TPB0 -
8	+12V
10	GND

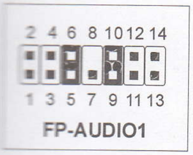
---

(7). Front Panel Audio Connection Header

This header provides the connection to audio connector at front panel.

- To use the audio connector at front panel, remove all the jumpers on this header, and then connect to front panel by the extension cable provided with the chassis.
- To use the audio connector at rear panel, disconnect the extension cable, attach the jumpers back at pin 5-6, and pin 9-10 (default setting).

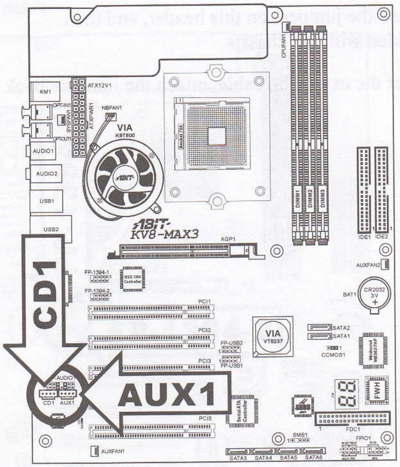


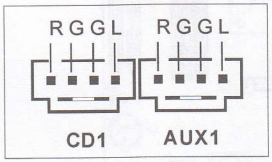


Pin	Pin Assignment	Pin	Pin Assignment
1	Audio Mic.	2	Ground
3	Audio Mic. Bias	4	VCC
5	Speaker Out Right Channel	6	Speaker Out Right Channel Return
7	X	8	NC
9	Speaker Out Left Channel	10	Speaker Out Left Channel Return
11	Ground	12	S/PDIF In
13	VCC	14	S/PDIF Out

(8). Internal Audio Connectors

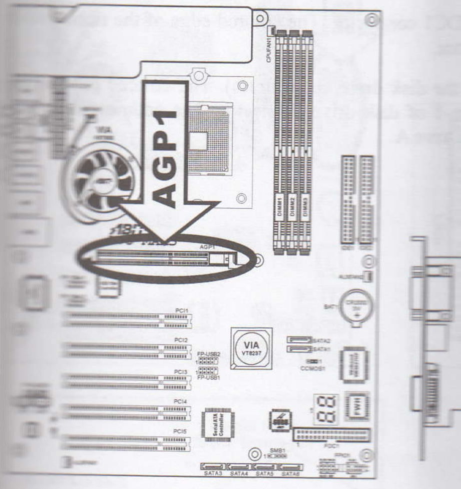
These connectors connect to the audio output of internal CD-ROM drive or add-on card.





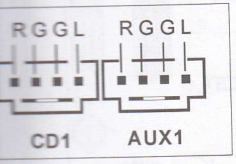
Accelerated Graphics Port Slot

This slot supports an optional AGP graphics card up
more information on graphics cards.



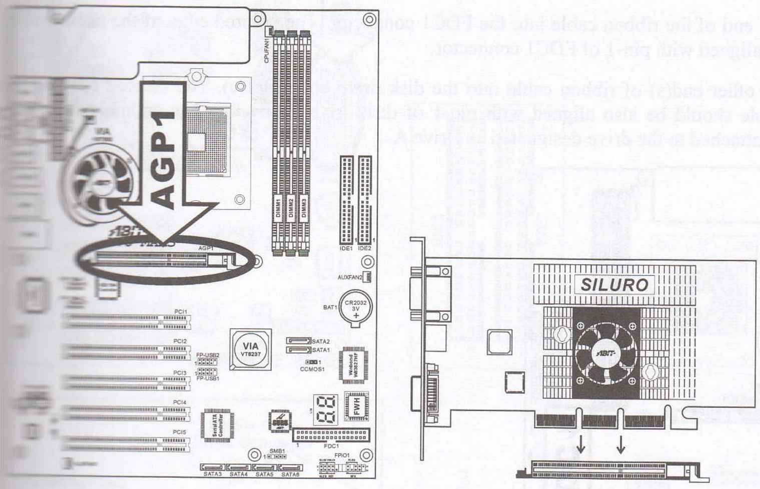
ATTENTION: This motherboard does not support 3.3

al CD-ROM drive or add-on card.



(9). Accelerated Graphics Port Slot

This slot supports an optional AGP graphics card up to AGP 8X mode. Please refer to our Web site for more information on graphics cards.



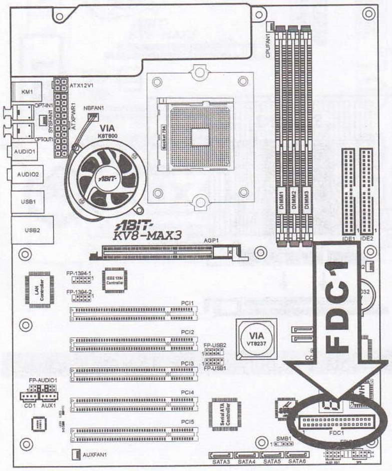
ATTENTION: This motherboard does not support 3.3V AGP cards. Use only 1.5V or 0.8V AGP cards.

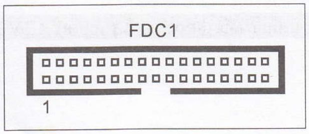
(10). Floppy Disk Drive Connector

This connector supports two standard floppy disk drives via a 34-pin 34-conductor ribbon cable.

Connecting the Floppy Disk Drive Cable:

1. Install one end of the ribbon cable into the FDC1 connector. The colored edge of the ribbon cable should be aligned with pin-1 of FDC1 connector.
2. Install the other end(s) of ribbon cable into the disk drive connector(s). The colored edge of the ribbon cable should be also aligned with pin-1 of disk drive connector. The endmost connector should be attached to the drive designated as Drive A.





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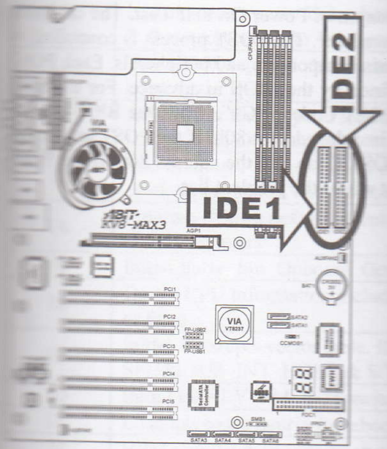
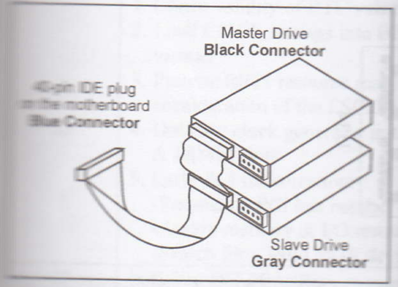
(11). IDE Connectors





This motherboard provides two IDE ports to conn
ATA/66 ribbon cables. Each cable has 40-pin 8
drives connection with motherboard. Connect the
ribbon cable to the IDE port on motherboard, and
shorter length of the ribbon cable to the connectors

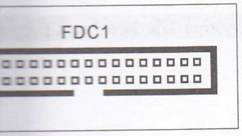
If you want to connect two hard drives together th
drive to Slave mode after the first Master drive.
settings. The first drive connected to IDE1 is usu
drive as "Primary Slave". The first drive connected
second drive as "Secondary Slave".

Keep away from connecting one legacy slow speed
on the same IDE channel; this will drop your integ

via a 34-pin 34-conductor ribbon cable.

connector. The colored edge of the ribbon cable

disk drive connector(s). The colored edge of the
of disk drive connector. The endmost connector
e A.



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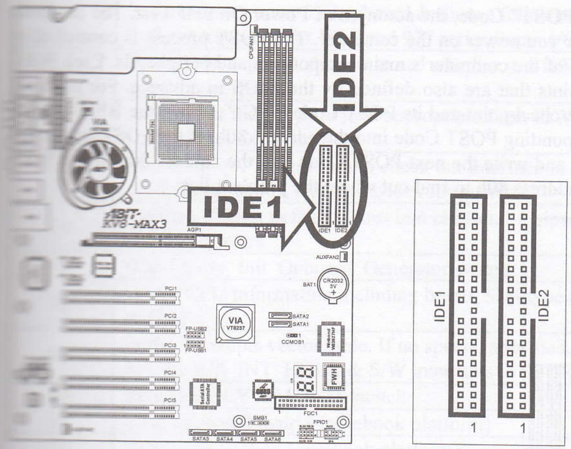
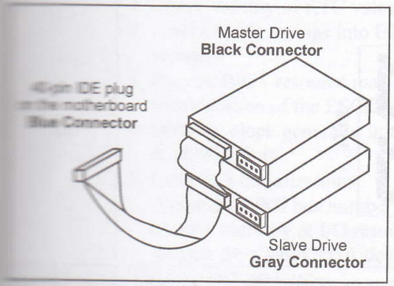
(11). IDE Connectors





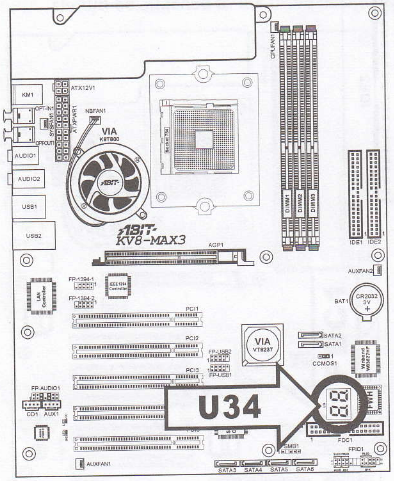
This motherboard provides two IDE ports to connect up to four IDE drives at Ultra DMA mode by Ultra ATA/66 ribbon cables. Each cable has 40-pin 80-conductor and three connectors, providing two hard drives connection with motherboard. Connect the single end (blue connector) at the longer length of ribbon cable to the IDE port on motherboard, and the other two ends (gray and black connector) at the shorter length of the ribbon cable to the connectors on hard drives.

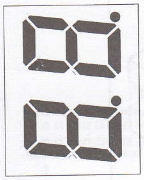
If you want to connect two hard drives together through one IDE channel, you must configure the second drive to Slave mode after the first Master drive. Please refer to the drives' documentation for jumper settings. The first drive connected to IDE1 is usually referred to as "Primary Master", and the second drive as "Primary Slave". The first drive connected to IDE2 is referred to as "Secondary Master" and the second drive as "Secondary Slave".

Keep away from connecting one legacy slow speed drive, like CD-ROM, together with another hard drive on the same IDE channel; this will drop your integral system performance.

(12). POST Code Display

This is an LED device to display the "**POST**" Code, the acronym of **P**ower **O**n **S**elf **T**est. The computer will execute the POST action whenever you power on the computer. The POST process is controlled by the BIOS. It is used to detect the status of the computer's main components and peripherals. Each POST Code corresponds to different checkpoints that are also defined by the BIOS in advance. For example, "memory presence test" is an important checkpoint and its POST Code is "C1". When the BIOS execute any POST item, it will write the corresponding POST Code into the address 80h. If the POST passes, the BIOS will process the next POST item and write the next POST Code into the address 80h. If the POST fails, we can check the POST Code in address 80h to find out where the problem lies.





The following table shows the POST Code in detail:

POST Code	Description
CF	Test CMOS R/W functionality
C0	Early chipset initialization: -Disable shadow RAM -Disable L2 cache (socket 7 or below) -Program basic chipset registers
C1	Detect memory -Auto-detection of DRAM size, type and ECC -Auto-detection of L2 cache (socket 7 or below)
C3	Expand compressed BIOS code to DRAM
C5	Call chipset hook to copy BIOS back to E000 & F000 shadow RAM
01	Expand the Xgroup codes locating in physical address 1000:0
03	Initial Superio Early Init switch
05	1. Blank out screen 2. Clear CMOS error flag
07	1. Clear 8042 interface 2. Initialize 8042 self-test

08	1. Test special keyboard controller f 2. Enable keyboard interface
0A	1. Disable PS/2 mouse interface (opt 2. Auto detect ports for keyboard & 3. Reset keyboard for Winbond 977
0E	Test F000h segment shadow to see w beeping the speaker
10	Auto detect flash type to load approp for ESCD & DMI support
12	Use walking 1's algorithm to check clock power status, and then check f
14	Program chipset default values into c OEM customers
16	Initial Early Init Onboard Generato
18	Detect CPU information including b or 686)
1B	Initial interrupts vector table. If no sp SPURIOUS INT HDLR & S/W inte
1D	Initial EARLY PM INIT switch
1F	Load keyboard matrix (notebook pla
21	HPM initialization (notebook platfor
23	1. Check validity of RTC value: e.g. 2. Load CMOS settings into BIOS st instead 3. Prepare BIOS resource map for PC consideration of the ESCD's legacy 4. Onboard clock generator initializat & DIMM slots 5. Early PCI initialization: -Enumerate PCI bus number -Assign memory & I/O resource -Search for a valid VGA device &
27	Initialize INT 09 buffer
29	1. Program CPU internal MTRR (P6 2. Initialize the APIC for Pentium clas 3. Program early chipset according to 4. Measure CPU speed 5. Invoke video BIOS
2D	1. Initialize multi-language 2. Put information on screen display,
33	Reset keyboard except Winbond 977
3C	Test 8254
3E	Test 8259 interrupt mask bits for chan
40	Test 8259 interrupt mask bits for chan
43	Test 8259 functionality
47	Initialize EISA slot
49	1. Calculate total memory by testing t 2. Program writes allocation for AMD

08	1. Test special keyboard controller for Winbond 977 series Super I/O chips 2. Enable keyboard interface
0A	1. Disable PS/2 mouse interface (optional) 2. Auto detect ports for keyboard & mouse followed by a port & interface swap (optional) 3. Reset keyboard for Winbond 977 series Super I/O chips
0E	Test F000h segment shadow to see whether it is R/W-able or not. If test fails, keep beeping the speaker
10	Auto detect flash type to load appropriate flash R/W codes into the run time area in F000 for ESCD & DMI support
12	Use walking 1's algorithm to check out interface in CMOS circuitry. Also set real-time clock power status, and then check for override
14	Program chipset default values into chipset. Chipset default values are MODBINable by OEM customers
16	Initial Early Init Onboard Generator switch
18	Detect CPU information including brand, SMI type (Cyrix or Intel) and CPU level (586 or 686)
1B	Initial interrupts vector table. If no special specified, all H/W interrupts are directed to SPURIOUS INT HDLR & S/W interrupts to SPURIOUS soft HDLR
1D	Initial EARLY PM INIT switch
1F	Load keyboard matrix (notebook platform)
21	HPM initialization (notebook platform)
23	1. Check validity of RTC value: e.g. a value of 5Ah is an invalid value for RTC minute 2. Load CMOS settings into BIOS stack. If CMOS checksum fails, use default value instead 3. Prepare BIOS resource map for PCI & PnP use. If ESCD is valid, take into consideration of the ESCD's legacy information 4. Onboard clock generator initialization. Disable respective clock resource to empty PCI & DIMM slots 5. Early PCI initialization: -Enumerate PCI bus number -Assign memory & I/O resource -Search for a valid VGA device & VGA BIOS, and put it into C000:0
27	Initialize INT 09 buffer
29	1. Program CPU internal MTRR (P6 & PII) for 0~640K memory address 2. Initialize the APIC for Pentium class CPU 3. Program early chipset according to CMOS setup. Example: onboard IDE controller 4. Measure CPU speed 5. Invoke video BIOS
2D	1. Initialize multi-language 2. Put information on screen display, including Award title, CPU type, CPU speed …
33	Reset keyboard except Winbond 977 series Super I/O chips
3C	Test 8254
3E	Test 8259 interrupt mask bits for channel 1
40	Test 8259 interrupt mask bits for channel 2
43	Test 8259 functionality
47	Initialize EISA slot
49	1. Calculate total memory by testing the last double word of each 64K page 2. Program writes allocation for AMD K5 CPU

4E	1. Program MTRR of M1 CPU 2. Initialize L2 cache for P6 class CPU & program CPU with proper cacheable range 3. Initialize the APIC for P6 class CPU 4. On MP platform, adjust the cacheable range to smaller one in case the cacheable ranges between each CPU are not identical
50	Initialize USB
52	Test all memory (clear all extended memory to 0)
55	Display number of processors (multi-processor platform)
57	Display PnP logo Early ISA PnP initialization -Assign CSN to every ISA PnP device
59	Initialize the combined Trend Anti-Virus code
5B	(Optional Feature) Show message for entering AWDFLASH.EXE from FDD (optional)
5D	1. Initialize Init_Onboard_Super_IO switch 2. Initialize Init_Onbaord_AUDIO switch
60	Okay to enter Setup utility; i.e. not until this POST stage can users enter the CMOS setup utility
65	Initialize PS/2 Mouse
67	Prepare memory size information for function call: INT 15h ax=E820h
69	Turn on L2 cache
6B	Program chipset registers according to items described in Setup & Auto-configuration table
6D	1. Assign resources to all ISA PnP devices 2. Auto assign ports to onboard COM ports if the corresponding item in Setup is set to "AUTO"
6F	1. Initialize floppy controller 2. Set up floppy related fields in 40:hardware
73	(Optional Feature) Enter AWDFLASH.EXE if: -AWDFLASH is found in floppy drive -ALT+F2 is pressed
75	Detect & install all IDE devices: HDD, LS120, ZIP, CDROM …
77	Detect serial ports & parallel ports.
7A	Detect & install co-processor
7F	Switch back to text mode if full screen logo is supported -If errors occur, report errors & wait for keys -If no errors occur or F1 key is pressed to continue: Clear EPA or customization logo
82	1. Call chipset power management hook 2. Recover the text fond used by EPA logo (not for full screen logo) 3. If password is set, ask for password
83	Save all data in stack back to CMOS
84	Initialize ISA PnP boot devices
85	1. USB final Initialization 2. NET PC: Build SYSID structure 3. Switch screen back to text mode 4. Set up ACPI table at top of memory 5. Invoke ISA adapter ROMs 6. Assign IRQs to PCI devices 7. Initialize APM 8. Clear noise of IRQs
93	Read HDD boot sector information for Trend Anti-Virus code

94	1. Enable L2 cache 2. Program boot up speed 3. Chipset final initialization 4. Power management final initiali 5. Clear screen & display summary 6. Program K6 write allocation 7. Program P6 class write combinin
95	1. Program daylight saving 2. Update keyboard LED & typema
96	1. Build MP table 2. Build & update ESCD 3. Set CMOS century to 20h or 19h 4. Load CMOS time into DOS time 5. Build MSIRQ routing table
FF	Boot attempt (INT 19h)

U with proper cacheable range

ller one in case the cacheable ranges

rm)

FLASH.EXE from FDD (optional)

age can users enter the CMOS setup

NT 15h ax=E820h

ed in Setup & Auto-configuration

responding item in Setup is set to

CDROM …

rted

e: Clear EPA or customization logo

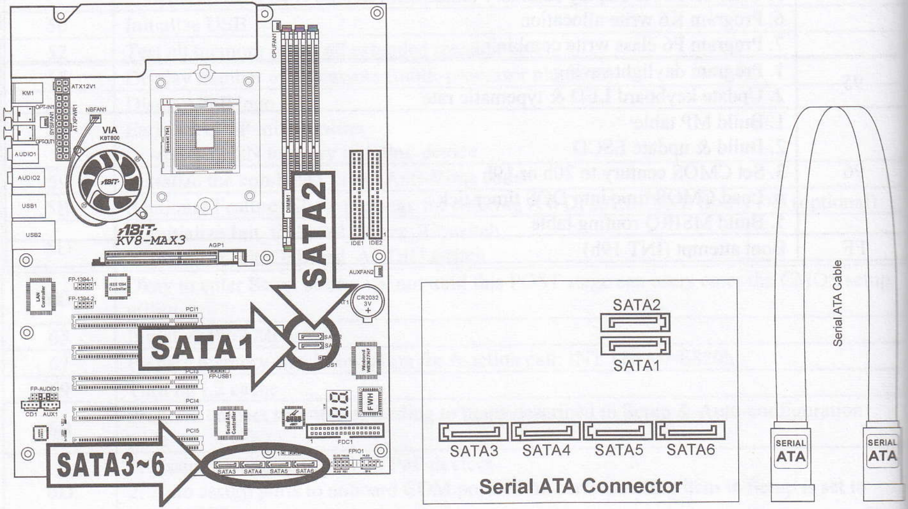
full screen logo)

Virus code

94	1. Enable L2 cache 2. Program boot up speed 3. Chipset final initialization 4. Power management final initialization 5. Clear screen & display summary table 6. Program K6 write allocation 7. Program P6 class write combining
95	1. Program daylight saving 2. Update keyboard LED & typematic rate
96	1. Build MP table 2. Build & update ESCD 3. Set CMOS century to 20h or 19h 4. Load CMOS time into DOS timer tick 5. Build MSIRQ routing table
FF	Boot attempt (INT 19h)

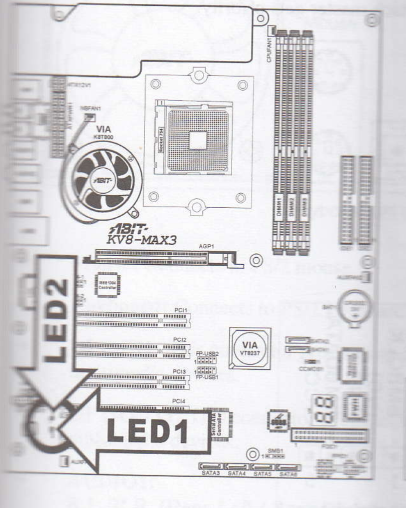
(13). Serial ATA Connectors

These connectors are provided to attach one Serial ATA device at each channel via Serial ATA cable.

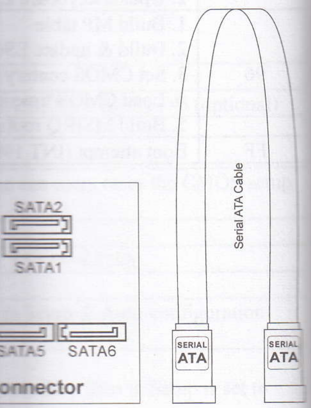


(14). Status Indicators

- **LED1 (5VSB):** This LED lights up w
- **LED2 (VCC):** This LED lights up wh

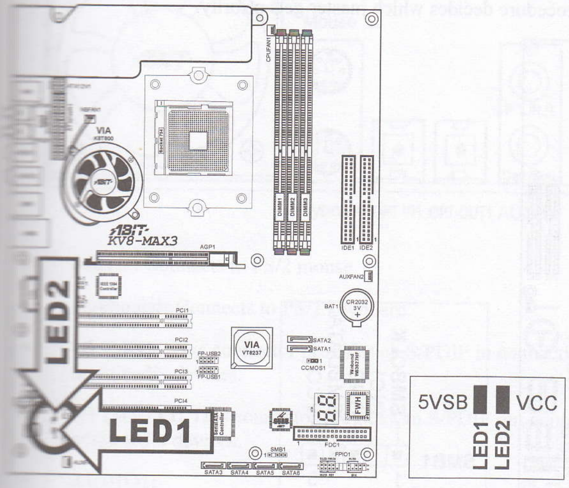


h channel via Serial ATA cable.



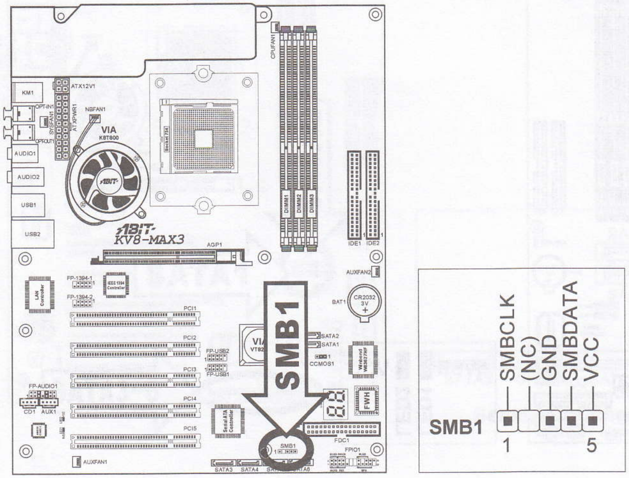
(14). Status Indicators

- **LED1 (5VSB):** This LED lights up when the power supply is connected with power source.
- **LED2 (VCC):** This LED lights up when the system power is on.



(15). System Management Bus Headers

This header is reserved for system management bus (SM bus). The SM bus is a specific implementation of an I^2C bus. I^2C is a multi-master bus, which means that multiple chips can be connected to the same bus and each one can act as a master by initiating a data transfer. If more than one master simultaneously tries to control the bus, an arbitration procedure decides which master gets priority.



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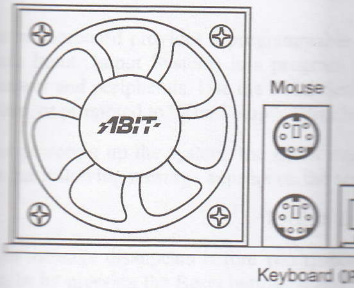
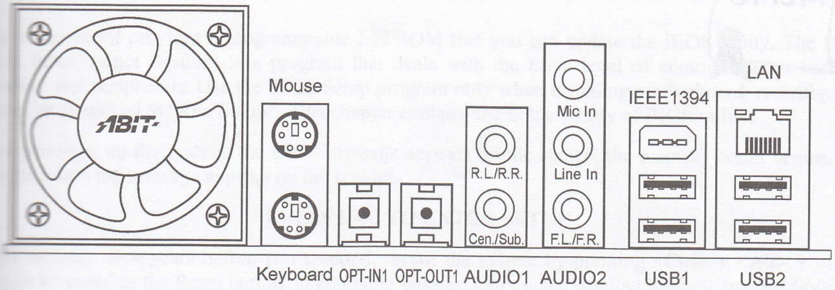
(16). Back Panel Connectors



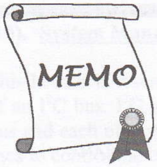
- **Mouse:** Connects to PS/2 mouse.
- **Keyboard:** Connects to PS/2 keyboa
- **OPT-IN1:** This connector provides
multimedia devices.
- **OPT-OUT1:** This connector provide
multimedia devices.
- **AUDIO1:**
R.L./R.R. (Rear Left / Rear Right)
channel audio system.
Cen./Sub. (Center / Subwoofer): C
channel audio system.
- **AUDIO2:**
Mic In: Connects to the plug from e
Line In: Connects to the line out fro
F.L./F.R. (Front Left / Front Right)
5.1-channel or regular 2-channel aud
- **IEEE1394:** Connects to devices of I
- **LAN:** Connects to Local Area Netwo
- **USB1/USB2:** Connects to USB devic
keyboard, hub, digital camera, joystic

. The SM bus is a specific implementation ultiple chips can be connected to the same er. If more than one master simultaneously master gets priority.

(16). Back Panel Connectors



- **Mouse:** Connects to PS/2 mouse.
- **Keyboard:** Connects to PS/2 keyboard.
- **OPT-IN1:** This connector provides an S/PDIF in connection through optical fiber to digital multimedia devices.
- **OPT-OUT1:** This connector provides an S/PDIF out connection through optical fiber to digital multimedia devices.
- **AUDIO1:**
  R.L./R.R. (Rear Left / Rear Right): Connects to the rear left and rear right channel in the 5.1 channel audio system.
  Cen./Sub. (Center / Subwoofer): Connects to the center and subwoofer channel in the 5.1 channel audio system.
- **AUDIO2:**
  Mic In: Connects to the plug from external microphone.
  Line In: Connects to the line out from external audio sources.
  F.L./F.R. (Front Left / Front Right): Connects to the front left and front right channel in the 5.1-channel or regular 2-channel audio system.
- **IEEE1394:** Connects to devices of IEEE1394 protocol.
- **LAN:** Connects to Local Area Network.
- **USB1/USB2:** Connects to USB devices such as scanner, digital speakers, monitor, mouse, keyboard, hub, digital camera, joystick etc.



Chapter 3. BIOS Setup

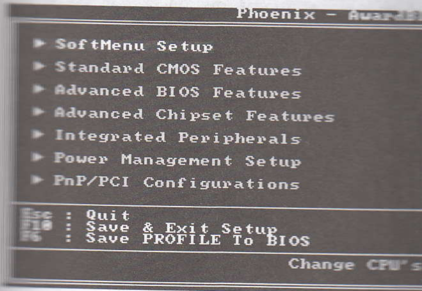
This motherboard provides a programmable EE
(Basic Input/Output System) is a program that
processor and peripherals. Use the BIOS Setup p
system, or prompted to "Run Setup". This chapte

After powering up the system, the BIOS messag
then the following message appears on the screen

PRESS DEL

If this message disappears before you respond,
keys, or by pressing the Reset button on compute
you restart the system by powering it off and then

After pressing <Del> key, the main menu screen



NOTE: In order to increase system stability an
improving the BIOS menu. The BIOS setup scre
your reference only, may not completely match w

In the BIOS Setup main menu, you can see severa
the following pages of this chapter, but let us firs
use here.

Esc:

Press this button to quit the BIOS Setup.

↑↓←→:

Press these buttons to choose, in the main menu, th

F10:

When you have completed the setup of BIOS para
to exit the BIOS Setup menu.

Chapter 3. BIOS Setup

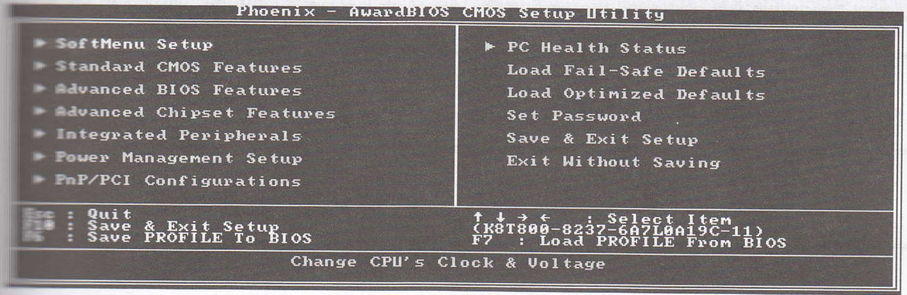
This motherboard provides a programmable EEPROM that you can update the BIOS utility. The BIOS (Basic Input/Output System) is a program that deals with the basic level of communication between processor and peripherals. Use the BIOS Setup program only when installing motherboard, reconfiguring system, or prompted to "Run Setup". This chapter explains the Setup Utility of BIOS utility.

After powering up the system, the BIOS message appears on the screen, the memory count begins, and then the following message appears on the screen:

PRESS DEL TO ENTER SETUP

If this message disappears before you respond, restart the system by pressing <Ctrl> + <Alt> + <Del> keys, or by pressing the Reset button on computer chassis. Only when it failed by these two methods can you restart the system by powering it off and then back on.

After pressing <Del> key, the main menu screen appears.



```
                    Phoenix - AwardBIOS CMOS Setup Utility
 ► SoftMenu Setup                        ► PC Health Status
 ► Standard CMOS Features                  Load Fail-Safe Defaults
 ► Advanced BIOS Features                  Load Optimized Defaults
 ► Advanced Chipset Features               Set Password
 ► Integrated Peripherals                  Save & Exit Setup
 ► Power Management Setup                  Exit Without Saving
 ► PnP/PCI Configurations

 Esc : Quit                              ↑ ↓ → ←   : Select Item
 F10 : Save & Exit Setup                 (K8T800-8237-6A7L0A19C-11)
 F6  : Save PROFILE To BIOS              F7  : Load PROFILE From BIOS
                         Change CPU's Clock & Voltage
```

NOTE: In order to increase system stability and performance, our engineering staffs are constantly improving the BIOS menu. The BIOS setup screens and descriptions illustrated in this manual are for your reference only, may not completely match what you see on your screen.

In the BIOS Setup main menu, you can see several options. We will explain these options step by step in the following pages of this chapter, but let us first see a short description of the function keys you may use here.

Esc:

Press this button to quit the BIOS Setup.

↑ ↓ ←→:

Press these buttons to choose, in the main menu, the option you want to confirm or to modify.

F10:

When you have completed the setup of BIOS parameters, press this button to save these parameters and to exit the BIOS Setup menu.

F6:

You may create a profile to save the new BIOS settings in it. Press <F6> button in the main menu, a dialog box with five numbers (1~5) will appear on the screen. Select one number, and press <Enter>. Then, you will get a confirmation dialog box with a message similar to:

Save Profile To BIOS (Y/N)?

After pressing "Y", the following message will appear to assist you in creating a name for the profile.

Enter Profile Name:

Type the profile name, and press <Enter>. The new BIOS settings now are saved to the selected profile.

NOTE: You may save up to five profiles to BIOS.

F7:

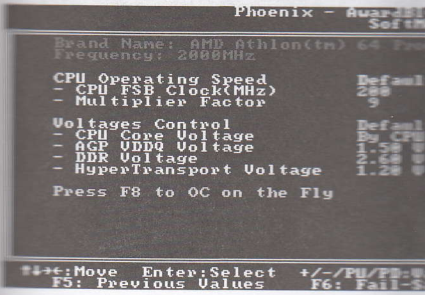
Press <F7> button in the main menu, a dialog box with five numbers (1~5) will appear on the screen. Select the profile you want, and press <Enter>. Then, you will get a confirmation dialog box with a message similar to:

Load Profile From BIOS (Y/N)?

Press "Y" to load the BIOS settings in this profile.

3-1. SoftMenu Setup

The SoftMenu utility is ABIT's exclusive and ulti
All the parameters regarding CPU FSB speed, mu
core voltage are all available at your fingertips.



```
                                 Phoenix - Award
                                            Soft
   Brand Name:  AMD Athlon(tm) 64 Pro
   Frequency:  2000MHz

   CPU Operating Speed                 Defaul
   - CPU FSB Clock(MHz)                200
   - Multiplier Factor                  9

   Voltages Control                    Defaul
   - CPU Core Voltage                  By CPU
   - AGP VDDQ Voltage                  1.50 V
   - DDR Voltage                       2.60 V
   - HyperTransport Voltage            1.20 V

   Press F8 to OC on the Fly

↑↓→←:Move  Enter:Select  +/-/PU/PD:V
  F5: Previous Values        F6: Fail-S
```

Brand Name:

This item displays the CPU model name, for exam

Frequency:

This item displays the processor speed.

CPU Operating Speed:

This item displays the CPU operating speed acco
select the [User Define] option to enter the manual

User Define:

WARNING: The wrong settings of the multiplier
CPU damage. Setting the working frequency high
abnormal memory module functioning, system ha
the VGA card, or abnormal functioning with other
CPU is not the intention of this explanation. These
applications.

There will be no guaranty for the settings beyond
motherboard or peripherals result therein is not our

- **CPU FSB Clock (MHz):**

This item sets the CPU Front Side Bus speed from
you installed, the speed you set over its standard bu

- **Multiplier Factor:**

This item sets the multiplier factor for the CPU you

n it. Press <F6> button in the main menu, a
reen. Select one number, and press <Enter>.
e similar to:

S (Y/N)?

sist you in creating a name for the profile.

me:

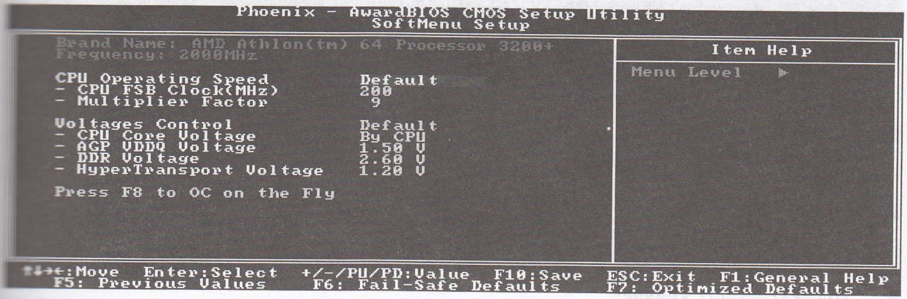
ettings now are saved to the selected profile.

ive numbers (1~5) will appear on the screen.
u will get a confirmation dialog box with a

OS (Y/N)?

3-1. SoftMenu Setup

The SoftMenu utility is ABIT's exclusive and ultimate solution in programming the CPU operating speed. All the parameters regarding CPU FSB speed, multiplier factor, the AGP & PCI clock, and even the CPU core voltage are all available at your fingertips.



```
                 Phoenix - AwardBIOS CMOS Setup Utility
                             SoftMenu Setup
   Brand Name: AMD Athlon(tm) 64 Processor 3200+    |     Item Help
   Frequency: 2000MHz                               | Menu Level   ►
                                                    |
   CPU Operating Speed          Default             |
   - CPU FSB Clock(MHz)         200                 |
   - Multiplier Factor           9                  |
                                                    |
   Voltages Control             Default             |
   - CPU Core Voltage           By CPU              |
   - AGP VDDQ Voltage           1.50 V              |
   - DDR Voltage                2.60 V              |
   - HyperTransport Voltage     1.20 V              |
                                                    |
   Press F8 to OC on the Fly                        |

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

Brand Name:

This item displays the CPU model name, for example: AMD Athlon(tm) 64 Processor 3200+.

Frequency:

This item displays the processor speed.

CPU Operating Speed:

This item displays the CPU operating speed according to the type and speed of your CPU. You can also select the [User Define] option to enter the manual option.

User Define:

WARNING: The wrong settings of the multiplier and external clock in certain circumstances may cause CPU damage. Setting the working frequency higher than the PCI chipset or processor specs, may cause abnormal memory module functioning, system hangs, hard disk drive data lose, abnormal functioning of the VGA card, or abnormal functioning with other add-on cards. Using non-specification settings for your CPU is not the intention of this explanation. These should be used for engineering testing, not for normal applications.

There will be no guaranty for the settings beyond specification, any damage of any component on this motherboard or peripherals result therein is not our responsibility.

- **CPU FSB Clock (MHz):**

This item sets the CPU Front Side Bus speed from 200 to 300. Due to the specification limit of the CPU you installed, the speed you set over its standard bus speed is supported, but not guaranteed.

- **Multiplier Factor:**

This item sets the multiplier factor for the CPU you installed.

NOTE: Some processors might have this multiplier factor locked, so there is no way to choose a higher multiplier factor.

Voltages Control:

This option allows you to switch between the default and user-defined voltages. Leave this setting to default unless the current voltage setting cannot be detected or is not correct. The option "**User Define**" enables you to select the following voltages manually.

❋ **CPU Core Voltage:**

This item selects the CPU core voltage.

❋ **AGP VDDQ Voltage:**

This item selects the voltage for AGP slot.

❋ **DDR Voltage:**

This item selects the voltage for DRAM slot.

❋ **HyperTransport Voltage:**

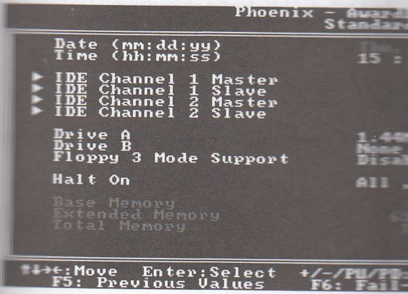
This item selects the voltage for LDT Bus.

Press F8 to OC on the Fly:

Pressing <F8> button now in this menu will make the new setting become effective.

3-2. Standard CMOS Featur

This section contains the basic configuration p
hour, VGA card, FDD and HDD settings.



```
                              Phoenix - Award
                                 Standar
   Date (mm:dd:yy)                          
   Time (hh:mm:ss)                          15 :

 ▶ IDE Channel 1 Master
 ▶ IDE Channel 1 Slave
 ▶ IDE Channel 2 Master
 ▶ IDE Channel 2 Slave

   Drive A                                  1.44
   Drive B                                  None
   Floppy 3 Mode Support                    Disa

   Halt On                                  All

   Base Memory
   Extended Memory
   Total Memory

↑↓→←:Move  Enter:Select  +/-/PU/PD:
   F5: Previous Values      F6: Fail-
```

Date (mm:dd:yy):

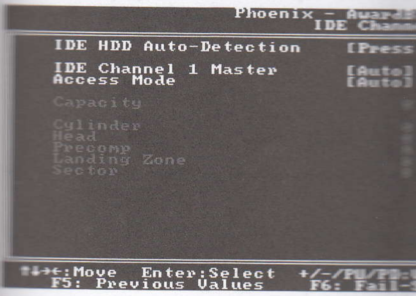
This item sets the date you specify (usually the c

Time (hh:mm:ss):

This item sets the time you specify (usually th
[Second].

IDE Channel 1 Master / Slave, IDE Channel 2

Click <Enter> key to enter its submenu:



```
                              Phoenix - Award
                                   IDE Chann
   IDE HDD Auto-Detection                   [Press

   IDE Channel 1 Master                     [Auto]
   Access Mode                              [Auto]

   Capacity

   Cylinder
   Head
   Precomp
   Landing Zone
   Sector

↑↓→←:Move  Enter:Select  +/-/PU/PD:
   F5: Previous Values      F6: Fail-
```

IDE HDD Auto-Detection:

This item allows you to detect the parameters of I
be shown on the screen automatically.

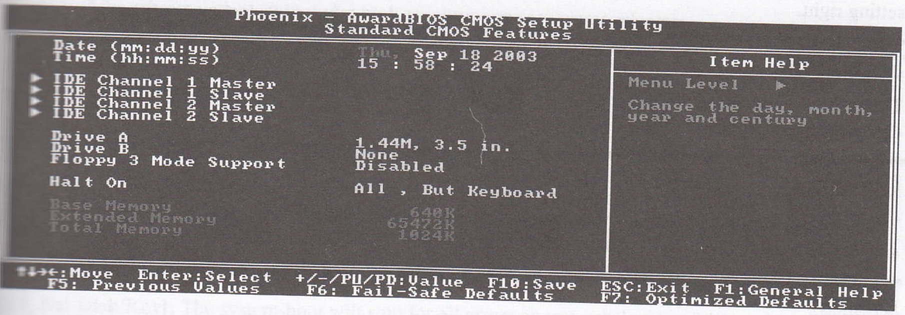
ocked, so there is no way to choose a higher

user-defined voltages. Leave this setting to
or is not correct. The option "**User Define**"

ting become effective.

3-2. Standard CMOS Features

This section contains the basic configuration parameters of the BIOS. These parameters include date, hour, VGA card, FDD and HDD settings.



```
            Phoenix - AwardBIOS CMOS Setup Utility
                   Standard CMOS Features
  Date (mm:dd:yy)               Thu, Sep 18 2003    |      Item Help
  Time (hh:mm:ss)               15 : 58 : 24        |
                                                    | Menu Level   ▶
▶ IDE Channel 1 Master                              |
▶ IDE Channel 1 Slave                               | Change the day, month,
▶ IDE Channel 2 Master                              | year and century
▶ IDE Channel 2 Slave                               |
                                                    |
  Drive A                       1.44M, 3.5 in.      |
  Drive B                       None                |
  Floppy 3 Mode Support         Disabled            |
                                                    |
  Halt On                       All , But Keyboard  |
                                                    |
  Base Memory                       640K            |
  Extended Memory                 65472K            |
  Total Memory                     1024K            |

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
  F5: Previous Values    F6: Fail-Safe Defaults     F7: Optimized Defaults
```

Date (mm:dd:yy):

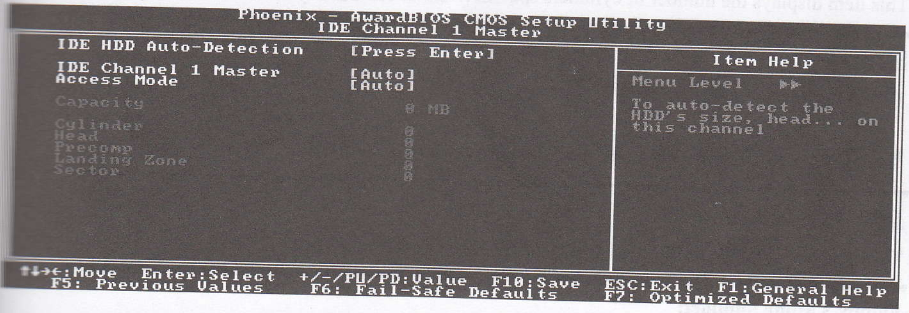
This item sets the date you specify (usually the current date) in the format of [Month], [Date], and [Year].

Time (hh:mm:ss):

This item sets the time you specify (usually the current time) in the format of [Hour], [Minute], and [Second].

IDE Channel 1 Master / Slave, IDE Channel 2 Master / Slave:

Click <Enter> key to enter its submenu:



```
            Phoenix - AwardBIOS CMOS Setup Utility
                    IDE Channel 1 Master
  IDE HDD Auto-Detection      [Press Enter]
                                                  |      Item Help
  IDE Channel 1 Master        [Auto]              |
  Access Mode                 [Auto]              | Menu Level   ▶▶
                                                  |
  Capacity                        0 MB            | To auto-detect the
                                                  | HDD's size, head... on
  Cylinder                        0               | this channel
  Head                            0               |
  Precomp                         0               |
  Landing Zone                    0               |
  Sector                          0               |

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
  F5: Previous Values    F6: Fail-Safe Defaults     F7: Optimized Defaults
```

IDE HDD Auto-Detection:

This item allows you to detect the parameters of IDE drives by pressing <Enter> key. The parameters will be shown on the screen automatically.

IDE Channel 1 Master / Slave, IDE Channel 2 Master / Slave:

When set to [Auto], the BIOS will automatically check what kind of IDE drive you are using. If you want to define your own drive by yourself, set it to [Manual] and make sure you fully understand the meaning of the parameters. Please refer to the instruction manual provided by the device's manufacturer to get the setting right.

Access Mode:

This item selects the mode to access your IDE devices. Leave this item to its default [Auto] setting to detect the access mode of your HDD automatically.

Capacity:

This item displays the approximate capacity of the disk drive. Usually the size is slightly greater than the size of a formatted disk given by a disk-checking program.

Cylinder:

This item configures the numbers of cylinders.

Head:

This item configures the numbers of read/write heads.

Precomp:

This item displays the number of cylinders at which to change the write timing.

Landing Zone:

This item displays the number of cylinders specified as the landing zone for the read/write heads.

Sector:

This item configures the numbers of sectors per track.

↳ Back to Standard CMOS Features Setup Menu:

Drive A & Drive B:

This item sets the type of floppy drives (usually only Drive A) installed.

Floppy 3 Mode Support:

This item allows you to use "3 Mode Floppy Drive" in Japanese computer system by selecting drive A, B, or both. Leave this item to its default [Disabled] setting if you are not using this Japanese standard floppy drive.

Video:

This item selects the type of video adapter used for the primary system monitor.

[EGA/VGA]: (Enhanced Graphics Adapter/Video
monitor adapters.

[CGA 40]: (Color Graphics Adapter) Power up in 4

[CGA 80]: (Color Graphics Adapter) Power up in 8

[Mono]: (Monochrome adapter) Includes high-reso

Halt On:

This item determines whether the system stops if an

[All Errors]: The system-boot will stop whenever t

[No Errors]: The system-boot will not stop for any

[All, But Keyboard]: The system-boot will stop fo

[All, But Diskette]: The system-boot will stop for a

[All, But Disk/Key]: The system-boot will stop for

Base Memory:

This item displays the amount of base memory ins
typically 640K for system with 640K or more memo

Extended Memory:

This item displays the amount of extended memory

Total Memory:

This item displays the total memory available in the

[EGA/VGA]: (Enhanced Graphics Adapter/Video Graphics Array) For EGA, VGA, SVGA and PGA monitor adapters.

[CGA 40]: (Color Graphics Adapter) Power up in 40-column mode.

[CGA 80]: (Color Graphics Adapter) Power up in 80-column mode.

[Mono]: (Monochrome adapter) Includes high-resolution monochrome adapters.

Halt On:

This item determines whether the system stops if an error is detected during system boot-up.

[All Errors]: The system-boot will stop whenever the BIOS detect a non-fatal error.

[No Errors]: The system-boot will not stop for any error detected.

[All, But Keyboard]: The system-boot will stop for all errors except a keyboard error.

[All, But Diskette]: The system-boot will stop for all errors except a diskette error.

[All, But Disk/Key]: The system-boot will stop for all errors except a diskette or keyboard error.

Base Memory:

This item displays the amount of base memory installed in the system. The value of the base memory is typically 640K for system with 640K or more memory size installed on the motherboard.

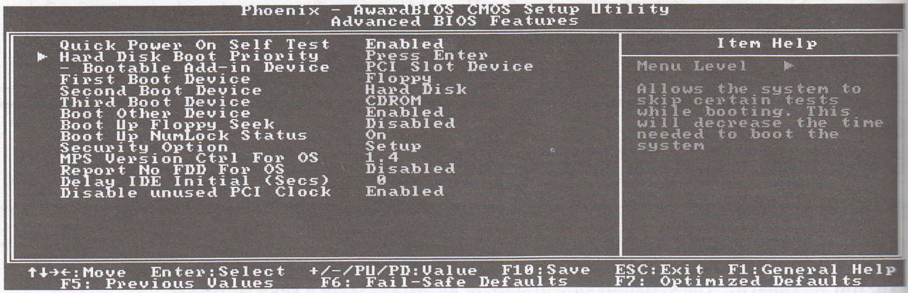
Extended Memory:

This item displays the amount of extended memory detected during system boot-up.

Total Memory:

This item displays the total memory available in the system.

3-3. Advanced BIOS Features



```
              Phoenix - AwardBIOS CMOS Setup Utility
                      Advanced BIOS Features

     Quick Power On Self Test      Enabled          |       Item Help
   ▶ Hard Disk Boot Priority       Press Enter      |
     - Bootable Add-in Device      PCI Slot Device  | Menu Level    ▶
     First Boot Device             Floppy           |
     Second Boot Device            Hard Disk        | Allows the system to
     Third Boot Device             CDROM            | skip certain tests
     Boot Other Device             Enabled          | while booting. This
     Boot Up Floppy Seek           Disabled         | will decrease the time
     Boot Up NumLock Status        On               | needed to boot the
     Security Option               Setup            | system
     MPS Version Ctrl For OS       1.4              |
     Report No FDD For OS          Disabled         |
     Delay IDE Initial (Secs)       0               |
     Disable unused PCI Clock      Enabled          |

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
     F5: Previous Values    F6: Fail-Safe Defaults    F7: Optimized Defaults
```

Quick Power On Self Test:

When set to [Enabled], this item speeds up the Power On Self Test (POST) after powering on the system. The BIOS shorten or skip some check during the POST.

Hard Disk Boot Priority:

This item selects the hard disks booting priority. By pressing <Enter> key, you can enter its submenu where the hard disks detected can be selected for the booting sequence to boot up system.

This item functions only when there is the option of [Hard Disk] in any one of the First/Second/Third Boot Device items.

❋ **Bootable Add-in Device:**

This item allows you to select the add-in device priority among the [PCI Slot Device], [Onchip SATA RAID], and [Onboard SATA RAID]. Onchip SATA RAID means VIA SATA RAID. Onboard SATA RAID means SIL3114 SATA RAID.

First Boot Device / Second Boot Device / Third Boot Device / Boot Other Device:

Select the drive to boot first, second and third in the [First Boot Device], [Second Boot Device], and [Third Boot Device] items respectively. The BIOS will boot the operating system according to the sequence of the drive selected. Set [Boot Other Device] to [Enabled] if you wish to boot from another device other than these three items.

Boot Up Floppy Seek:

When set to [Enabled], the BIOS will check whether the floppy disk drive is installed or not.

Boot Up NumLock Status:

This item determines the default state of the numeric keypad at system booting up.

[On]: The numeric keypad functions as number keys.

[Off]: The numeric keypad functions as arrow keys.

Security Option:

This item determines when the system will p
when enters the BIOS setup.

[Setup]: The password is required only when

[System]: The password is required each time

NOTE: Don't forget your password. If you fo
and clear all information in the CMOS befor
have to reset all previously set options.

MPS Version Ctrl For OS:

This item specifies which version of MPS (M
options are 1.1 and 1.4. The default setting is
please set this option to 1.1.

Report No FDD For OS:

When set to [Enabled], this item allows you to
Leave this item to its default setting.

Delay IDE Initial (Secs):

This item allows the BIOS to support some o
larger value will give more delay time to the d

Disable unused PCI Clock:

This option disables the clock of PCI slot that

[Enabled]: The system automatically detect t
unused PCI slots.

[Disabled]: The system always send clock sig

NOTE: Set this option to [Disabled] setting i
the system and will cause malfunction.

Security Option:

This item determines when the system will prompt for password - every time the system boots or only when enters the BIOS setup.

[Setup]: The password is required only when accessing the BIOS Setup.

[System]: The password is required each time the computer boots up.

NOTE: Don't forget your password. If you forget the password, you will have to open the computer case and clear all information in the CMOS before you can start up the system. But by doing this, you will have to reset all previously set options.

MPS Version Ctrl For OS:

This item specifies which version of MPS (Multi-Processor Specification) this motherboard will use. The options are 1.1 and 1.4. The default setting is *1.4*. If you use an older OS for dual processor executing, please set this option to 1.1.

Report No FDD For OS:

When set to [Enabled], this item allows you to run some older operating system without floppy disk drive. Leave this item to its default setting.

Delay IDE Initial (Secs):

This item allows the BIOS to support some old or special IDE devices by prolonging this delay time. A larger value will give more delay time to the device for which to initialize and to prepare for activation.

Disable unused PCI Clock:

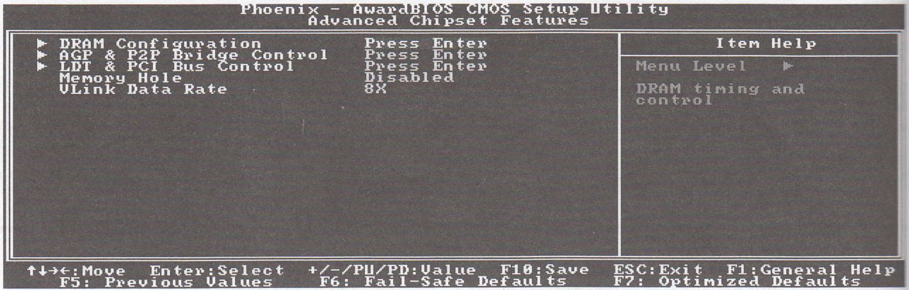
This option disables the clock of PCI slot that is not in use.

[Enabled]: The system automatically detect the unused PCI slots, and stop sending clock signal to these unused PCI slots.

[Disabled]: The system always send clock signal to all PCI slots.

NOTE: Set this option to [Disabled] setting if there are adapters that cannot be automatically detected by the system and will cause malfunction.

3-4. Advanced Chipset Features



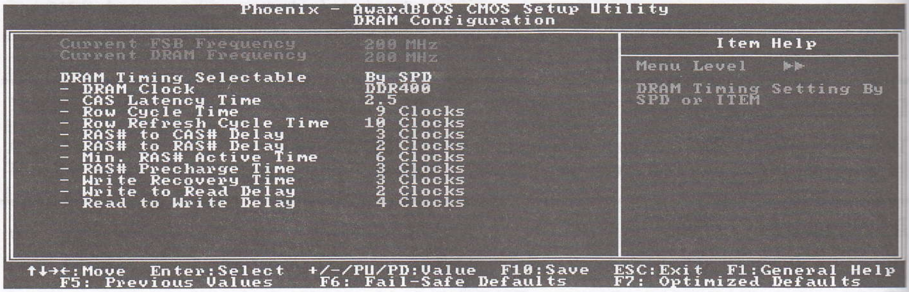
```
            Phoenix - AwardBIOS CMOS Setup Utility
                 Advanced Chipset Features

 ► DRAM Configuration          Press Enter      Item Help
 ► AGP & P2P Bridge Control    Press Enter
 ► LDT & PCI Bus Control       Press Enter   Menu Level   ►
   Memory Hole                 Disabled
   VLink Data Rate             8X            DRAM timing and
                                             control

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
    F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

DRAM Configuration:

Click <Enter> key to enter its submenu:



```
            Phoenix - AwardBIOS CMOS Setup Utility
                    DRAM Configuration

   Current FSB Frequency       200 MHz          Item Help
   Current DRAM Frequency      200 MHz
                                             Menu Level   ►►
   DRAM Timing Selectable      By SPD
   - DRAM Clock                DDR400        DRAM Timing Setting By
   - CAS Latency Time          2.5           SPD or ITEM
   - Row Cycle Time             9 Clocks
   - Row Refresh Cycle Time    10 Clocks
   - RAS# to CAS# Delay         3 Clocks
   - RAS# to RAS# Delay         2 Clocks
   - Min. RAS# Active Time      6 Clocks
   - RAS# Precharge Time        3 Clocks
   - Write Recovery Time        3 Clocks
   - Write to Read Delay        2 Clocks
   - Read to Write Delay        4 Clocks

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
    F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

Current FSB Frequency:

This item will show you the current system front side bus speed.

Current DRAM Frequency:

This item will show you the current DRAM bus speed.

DRAM Timing Selectable:

Two options are available: Manual ➔ By SPD. The default setting is *By SPD*. When set to "**By SPD**", the BIOS will read the DRAM module SPD data and automatically set to the values stored in it.

❋ **DRAM Clock:**

This item sets the DRAM clock of your DRAM module. The system may be unstable or unable to boot up if your DRAM module does not support the clock you set.

When set to [By SPD], the BIOS will read the DRAM module SPD data and automatically set the DRAM clock by the value stored in it.

❋ **CAS Latency Time:**

Three options are available: 2 ➔ 2.5 ➔ 3. Th
(Column Address Strobe) latency time accord

❋ **Row Cycle Time:**

This item specifies the RAS# active to RAS# a

❋ **Row Refresh Cycle Time:**

This item specifies the auto refresh active to R

❋ **RAS# to CAS# Delay:**

This item specifies the RAS# active to CAS#

❋ **RAS# to RAS# Delay:**

This item specifies the RAS# active to RAS# a

❋ **Min. RAS# Active Time:**

This item specifies the minimum RAS# active

❋ **RAS# Precharge Time:**

This item specifies the RAS# precharge time.

❋ **Write Recovery Time:**

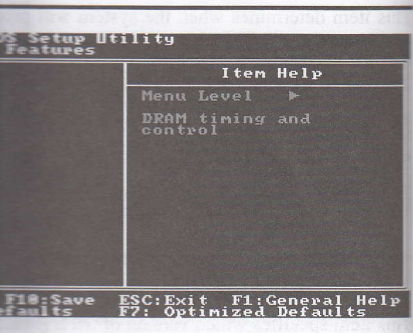
This item specifies the time measured from th

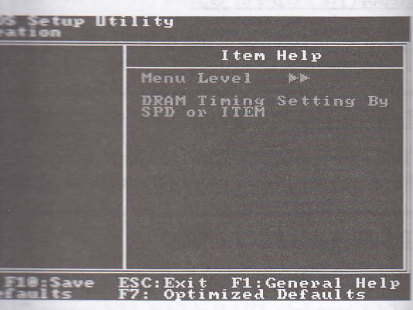
❋ **Write to Read Delay:**

This item specifies the time measured from the
the rising edge of the next read command.

❋ **Read to Write Delay:**

This item specifies the read to write delay.





S Setup Utility
ration
Item Help
Menu Level ▶▶
DRAM Timing Setting By SPD or ITEM
F10:Save ESC:Exit F1:General Help
efaults F7: Optimized Defaults

speed.

lt setting is *By SPD*. When set to "**By SPD**", the
tically set to the values stored in it.

The system may be unstable or unable to boot up
t.

dule SPD data and automatically set the DRAM

- **CAS Latency Time:**

Three options are available: 2 → 2.5 → 3. The default setting is *2.5*. You can select SDRAM CAS (Column Address Strobe) latency time according your SDRAM specification.

- **Row Cycle Time:**

This item specifies the RAS# active to RAS# active time or auto refresh time of the same bank.

- **Row Refresh Cycle Time:**

This item specifies the auto refresh active to RAS# active time or RAS# auto refresh time.

- **RAS# to CAS# Delay:**

This item specifies the RAS# active to CAS# read write delay time to the same bank.

- **RAS# to RAS# Delay:**

This item specifies the RAS# active to RAS# active delay time of different bank.

- **Min. RAS# Active Time:**

This item specifies the minimum RAS# active time.

- **RAS# Precharge Time:**

This item specifies the RAS# precharge time.

- **Write Recovery Time:**

This item specifies the time measured from the last write datum is safely registered by the DRAM.

- **Write to Read Delay:**

This item specifies the time measured from the rising edge following the last non-masked data strobe to the rising edge of the next read command.

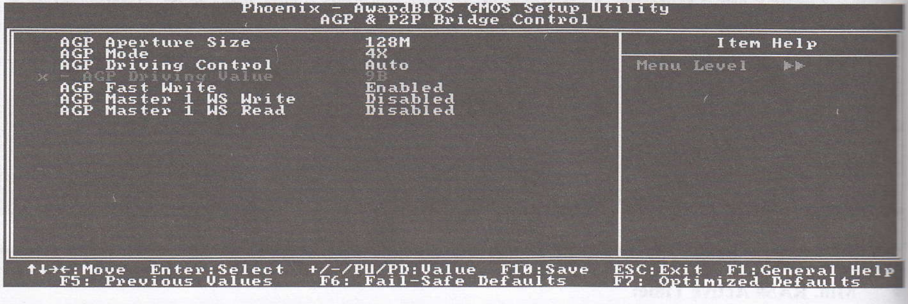
- **Read to Write Delay:**

This item specifies the read to write delay.

Back to Advanced Chipset Features Setup Menu:

AGP & P2P Bridge Control:

Click <Enter> key to enter its submenu:



```
             Phoenix - AwardBIOS CMOS Setup Utility
                     AGP & P2P Bridge Control

    AGP Aperture Size             128M        |       Item Help
    AGP Mode                      4X          |
    AGP Driving Control           Auto        | Menu Level    ▶▶
  x - AGP Driving Value           9B          |
    AGP Fast Write                Enabled     |
    AGP Master 1 WS Write         Disabled    |
    AGP Master 1 WS Read          Disabled    |

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

AGP Aperture Size:

This option specifies the amount of system memory that can be used by the AGP device. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space.

AGP Mode:

This item selects the data transfer rate of AGP device. A higher rate delivers faster and better graphics to your system. Make sure your graphics card supports the mode you select.

AGP Driving Control:

Leave this item to its default setting.

✵ AGP Driving Value:

Leave this item to its default setting.

AGP Fast Write:

Two options are available: Disabled → Enabled. The default setting is *Enabled*. If your AGP adapter can support this function, then you can choose *Enabled*. Otherwise, choose *Disabled*.

AGP Master 1 WS Write:

Two options are available: Disabled → Enabled. The default setting is *Disabled*. This implements a single delay when writing to the AGP Bus. When you set it to *Enabled*, two-wait states are used by the system, allowing for greater stability.

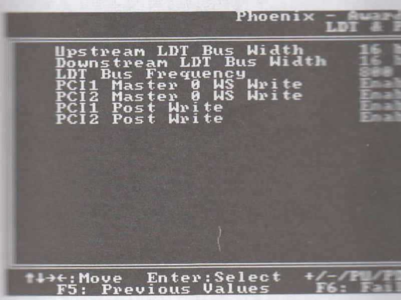
AGP Master 1 WS Read:

Two options are available: Disabled → Enabled. The default setting is *Disabled*. This implements a single delay when reading to the AGP Bus. When you set it to *Enabled*, two-wait states are used by the system, allowing for greater stability.

Back to Advanced Chipset Fea

LDT & PCI Bus Control:

Click <Enter> key to enter its submenu:



```
                       Phoenix - Award
                                LDT & P

    Upstream LDT Bus Width          16 b
    Downstream LDT Bus Width        16 b
    LDT Bus Frequency               800
    PCI1 Master 0 WS Write          Enab
    PCI2 Master 0 WS Write          Enab
    PCI1 Post Write                 Enab
    PCI2 Post Write                 Enab

 ↑↓→←:Move  Enter:Select  +/-/PU/PD
   F5: Previous Values     F6: Fail
```

Upstream/Downstream LDT Bus Width:

This item allows you to select LDT Bus Width

LDT Bus Frequency:

This item allows you to select LDT Bus Freque

PCI1/PCI2 Master 0 WS Write:

Two options are available: Enabled or Disablec
the PCI bus are executed with zero wait state (
set to *Disabled*, the system will wait one state

PCI1/PCI2 Post Write:

Two options are available: Enabled or Disable
from CPU to PCI bus are buffered and compen
is set to *Disabled*, data transmissions are not
complete and then start another transmission c

Back to Advanced Chipset Fea

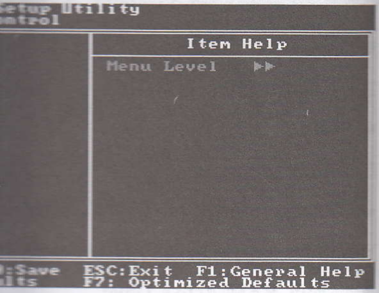
Memory Hole:

When set to [15M–16M], the memory addre
cards that specifically requires this setting. Thi
system. Leave this item to its default setting.

Vlink Data Rate:

This item can let you select the Vlink Data Ra

o Menu:



```
Setup Utility
ntrol
            Item Help
  Menu Level   ▶▶

:Save    ESC:Exit   F1:General Help
lts      F7: Optimized Defaults
```

e used by the AGP device. The aperture is a ics memory address space.

er rate delivers faster and better graphics to e you select.

setting is *Enabled*. If your AGP adapter can e, choose *Disabled*.

setting is *Disabled*. This implements a *Enabled*, two-wait states are used by the

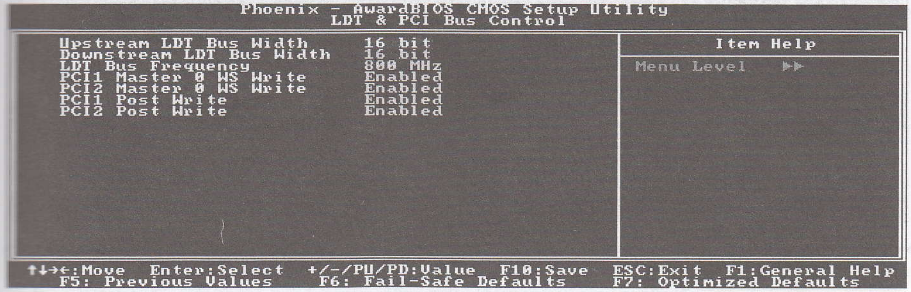
setting is *Disabled*. This implements a *Enabled*, two-wait states are used by the

---

➯ Back to Advanced Chipset Features Setup Menu:

LDT & PCI Bus Control:

Click <Enter> key to enter its submenu:



```
              Phoenix - AwardBIOS CMOS Setup Utility
                       LDT & PCI Bus Control

   Upstream LDT Bus Width        16 bit              Item Help
   Downstream LDT Bus Width      16 bit
   LDT Bus Frequency             800 MHz        Menu Level   ▶▶
   PCI1 Master 0 WS Write        Enabled
   PCI2 Master 0 WS Write        Enabled
   PCI1 Post Write               Enabled
   PCI2 Post Write               Enabled

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

Upstream/Downstream LDT Bus Width:

This item allows you to select LDT Bus Width.

LDT Bus Frequency:

This item allows you to select LDT Bus Frequency.

PCI1/PCI2 Master 0 WS Write:

Two options are available: Enabled or Disabled. The default setting is *Enabled.* When *Enabled,* writes to the PCI bus are executed with zero wait state (immediately) when PCI bus is ready to receive data. If it is set to *Disabled*, the system will wait one state before data is written to the PCI bus.

PCI1/PCI2 Post Write:

Two options are available: Enabled or Disabled. The default is *Enabled*, When *Enable*, data transmission from CPU to PCI bus are buffered and compensate for the different speed between CPU and PCI bus. If it is set to *Disabled*, data transmissions are not buffered and CPU must wait until the data transmission is complete and then start another transmission cycle.

➯ Back to Advanced Chipset Features Setup Menu:

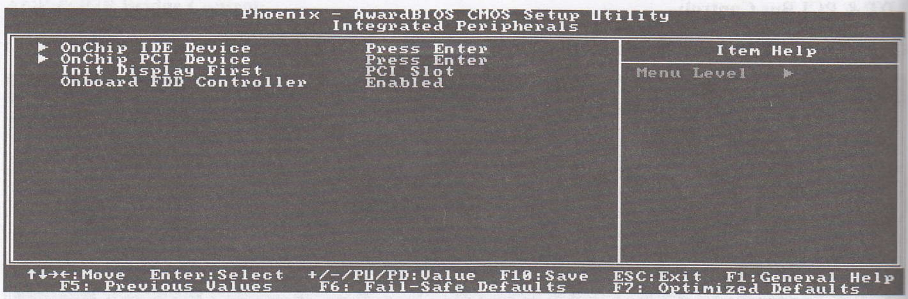
Memory Hole:

When set to [15M–16M], the memory address space at 15M-16M will be reserved for ISA expansion cards that specifically requires this setting. This makes the memory from 15MB and up unavailable to the system. Leave this item to its default setting.

Vlink Data Rate:

This item can let you select the Vlink Data Rate between northbridge and southbridge.

3-5. Integrated Peripherals

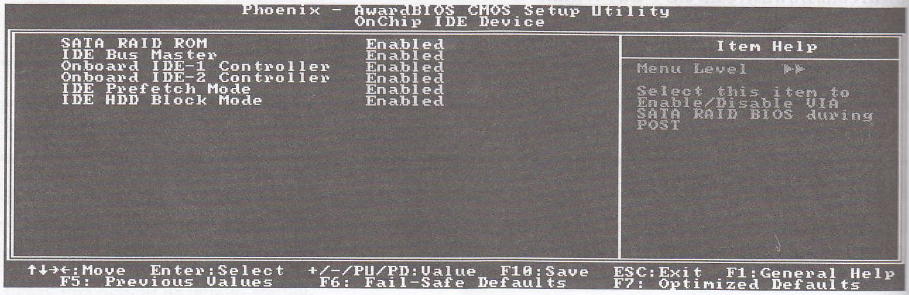


```
              Phoenix - AwardBIOS CMOS Setup Utility
                     Integrated Peripherals
 ► OnChip IDE Device            Press Enter   |        Item Help
 ► OnChip PCI Device            Press Enter   |
   Init Display First           PCI Slot      | Menu Level   ►
   Onboard FDD Controller       Enabled       |

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults   F7: Optimized Defaults
```

OnChip IDE Device:

Click <Enter> key to enter its submenu:



```
              Phoenix - AwardBIOS CMOS Setup Utility
                        OnChip IDE Device
   SATA RAID ROM                Enabled       |        Item Help
   IDE Bus Master               Enabled       |
   Onboard IDE-1 Controller     Enabled       | Menu Level   ►►
   Onboard IDE-2 Controller     Enabled       |
   IDE Prefetch Mode            Enabled       | Select this item to
   IDE HDD Block Mode           Enabled       | Enable/Disable VIA
                                              | SATA RAID BIOS during
                                              | POST

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults   F7: Optimized Defaults
```

SATA RAID ROM:

This item allows you to use the boot ROM of on-chip Serial ATA RAID to boot-up system.

IDE Bus Master:

This option enables or disables the IDE bus mastering capability under the DOS environment.

Onboard IDE-1/IDE-2 Controller:

This item allows you to enable or disable the primary and secondary IDE controller. Select [Disabled] if you want to add a different hard drive controller.

IDE Prefetch Mode:

Two options are available: Disabled or Enabled. The default setting is *Enabled*. The onboard IDE drive interfaces supports IDE prefetching for faster drive accesses. If you install a primary and/or secondary add-in IDE interface, set this field to *Disabled* if the interface does not support prefetching.

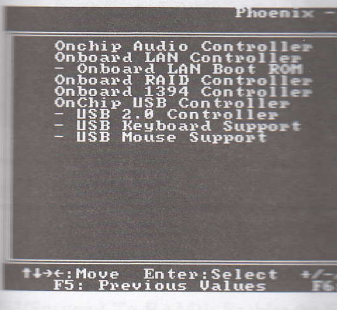
IDE HDD Block Mode:

This option enables or disables the IDE

Back to Integrated Periph

OnChip PCI Device:

Click <Enter> key to enter its submen



```
                    Phoenix -
     Onchip Audio Controller
     Onboard LAN Controller
     - Onboard LAN Boot ROM
     Onboard RAID Controller
     Onboard 1394 Controller
     OnChip USB Controller
     - USB 2.0 Controller
     - USB Keyboard Support
     - USB Mouse Support

↑↓→←:Move  Enter:Select  +/-
   F5: Previous Values    F6
```

OnChip Audio Controller:

This option enables or disables the audi

Onboard LAN Controller:

This option enables or disables the LAN

Onboard LAN Boot ROM:

This item enables or disables the Boot R

Onboard RAID Controller:

This option enables or disables the SIL3

Onboard 1394 Controller:

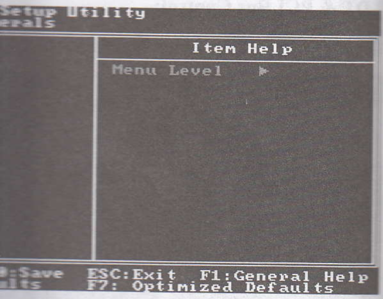
This option enables or disables the onbo

OnChip USB Controller:

This option enables or disables the USB

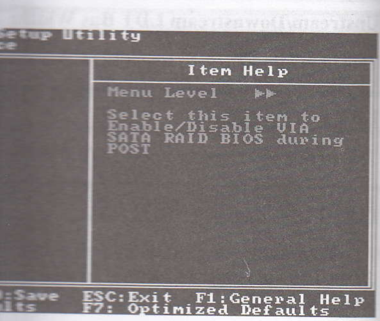
- **USB 2.0 Controller:**

This option enables or disables the USB



```
etup Utility
erals
                 Item Help
             Menu Level    ►

:Save    ESC:Exit   F1:General Help
lts      F7: Optimized Defaults
```



```
etup Utility
e
                 Item Help
             Menu Level    ►►

             Select this item to
             Enable/Disable VIA
             SATA RAID BIOS during
             POST

:Save    ESC:Exit   F1:General Help
its      F7: Optimized Defaults
```

ATA RAID to boot-up system.

ity under the DOS environment.

condary IDE controller. Select [Disabled] if

setting is *Enabled*. The onboard IDE drive . If you install a primary and/or secondary does not support prefetching.

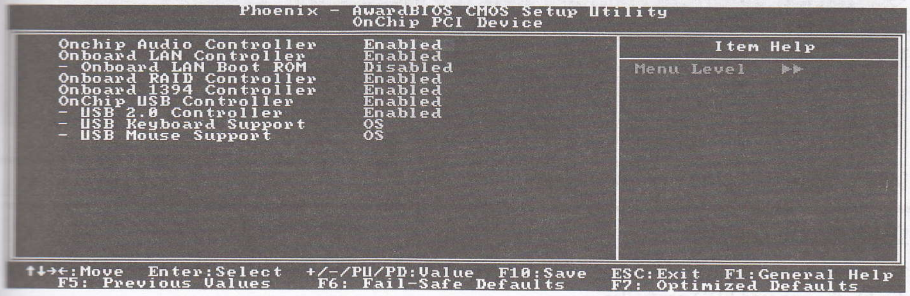
IDE HDD Block Mode:

This option enables or disables the IDE HDD block mode.

Back to Integrated Peripherals Setup Menu:

OnChip PCI Device:

Click <Enter> key to enter its submenu:



```
                    Phoenix - AwardBIOS CMOS Setup Utility
                              OnChip PCI Device

    Onchip Audio Controller        Enabled                    Item Help
    Onboard LAN Controller         Enabled              Menu Level    ►►
    - Onboard LAN Boot ROM         Disabled
    Onboard RAID Controller        Enabled
    Onboard 1394 Controller        Enabled
    OnChip USB Controller          Enabled
    - USB 2.0 Controller           Enabled
    - USB Keyboard Support         OS
    - USB Mouse Support            OS

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
    F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

OnChip Audio Controller:

This option enables or disables the audio controller.

Onboard LAN Controller:

This option enables or disables the LAN controller.

Onboard LAN Boot ROM:

This item enables or disables the Boot ROM on LAN controller.

Onboard RAID Controller:

This option enables or disables the SIL3114 SATA RAID controller.

Onboard 1394 Controller:

This option enables or disables the onboard IEEE 1394 controller.

OnChip USB Controller:

This option enables or disables the USB controller.

- **USB 2.0 Controller:**

This option enables or disables the USB 2.0 controller.

❋ **USB Keyboard Support:**

This item allows you to select [**BIOS**] for using USB keyboard in DOS environment, or [**OS**] in OS environment.

❋ **USB Mouse Support:**

This item allows you to select [**BIOS**] for using USB mouse in DOS environment, or [**OS**] in OS environment.

↳ Back to Integrated Peripherals Setup Menu:

Init Display First:

This item selects to initialize AGP or PCI Slot first when the system boots.

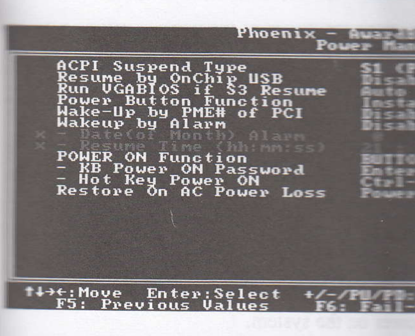
[PCI Slot]: When the system boots, it will first initialize PCI.

[AGP]: When the system boots, it will first initialize AGP.

Onboard FDD Controller:

Two options are available: Enabled and Disabled. The default setting is ***Enabled***. You can enable or disable the onboard FDD controller.

3-6. Power Management Setu



```
                              Phoenix - Award
                                   Power Man
   ACPI Suspend Type                 S1 (P
   Resume by OnChip USB              Disab
   Run VGABIOS if S3 Resume          Auto
   Power Button Function             Insta
   Wake-Up by PME# of PCI            Disab
   Wakeup by Alarm                   Disab
 x - Date(of Month) Alarm             0
 x - Resume Time (hh:mm:ss)          21
   POWER ON Function                 BUTTO
   - KB Power ON Password            Enter
   - Hot Key Power ON                Ctrl-
   Restore On AC Power Loss          Power

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:
   F5: Previous Values      F6: Fail-
```

ACPI Suspend Type:

This item selects the type of Suspend mode.

[S1(PowerOn-Suspend)]: *Enables the Power On*

[S3(Suspend-To-RAM)]: Enables the Suspend t

Resume by OnChip USB:

Two options are available: Disabled or Enabled. T
any event affecting from onchip USB will awaken

Run VGABIOS if S3 Resume:

Three options are available: Auto → Yes → No.
when S3 resume active, the VGA BIOS need to b

Power Button Function:

This item selects the method of powering off your

[Delay 4 Sec.]: Pushing the power button for mo
prevent the system from powering off in case you

[Instant-Off]: Pressing and then releasing the p
system.

Wakeup by PME# of PCI:

Two options are available: Disabled or Enabled. T
any event affecting from PCI card (PME) will awa

Wakeup by Alarm:

Two options are available: Disabled or Enabled. T
you can set the date and time at which the RTC (r
mode.

ard in DOS environment, or [OS] in OS

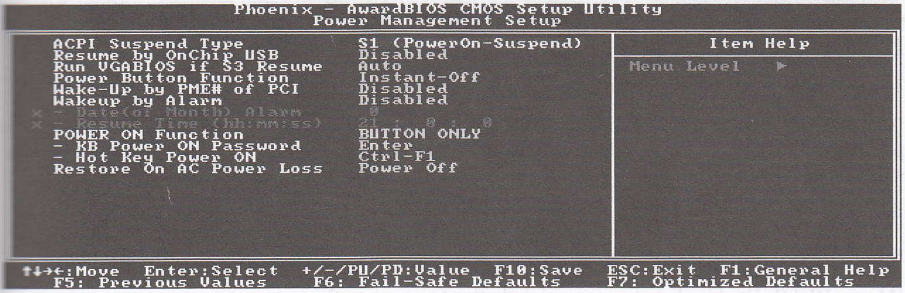
se in DOS environment, or [OS] in OS

u:

ystem boots.

lt setting is *Enabled*. You can enable or

3-6. Power Management Setup



```
              Phoenix - AwardBIOS CMOS Setup Utility
                      Power Management Setup
   ACPI Suspend Type            S1 (PowerOn-Suspend)        Item Help
   Resume by OnChip USB         Disabled
   Run VGABIOS if S3 Resume     Auto                   Menu Level   ►
   Power Button Function        Instant-Off
   Wake-Up by PME# of PCI       Disabled
   Wakeup by Alarm              Disabled
 x - Date(of Month) Alarm       0
 x - Resume Time (hh:mm:ss)     21 : 0 : 0
   POWER ON Function            BUTTON ONLY
   - KB Power ON Password       Enter
   - Hot Key Power ON           Ctrl-F1
   Restore On AC Power Loss     Power Off

 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values       F6: Fail-Safe Defaults    F7: Optimized Defaults
```

ACPI Suspend Type:

This item selects the type of Suspend mode.

[S1(PowerOn-Suspend)]: Enables the Power On Suspend function.

[S3(Suspend-To-RAM)]: Enables the Suspend to RAM function.

Resume by OnChip USB:

Two options are available: Disabled or Enabled. The default setting is *Disabled.* When set to *Enabled*, any event affecting from onchip USB will awaken a system that has powered down.

Run VGABIOS if S3 Resume:

Three options are available: Auto ➔ Yes ➔ No. The default setting is Auto. This item can let you choose when S3 resume active, the VGA BIOS need to be initiative or not.

Power Button Function:

This item selects the method of powering off your system:

[Delay 4 Sec.]: Pushing the power button for more than 4 seconds will power off the system. This will prevent the system from powering off in case you accidentally hit or pushed the power button.

[Instant-Off]: Pressing and then releasing the power button at once will immediately power off the system.

Wakeup by PME# of PCI:

Two options are available: Disabled or Enabled. The default setting is *Disabled.* When set to *Enabled*, any event affecting from PCI card (PME) will awaken a system that has powered down.

Wakeup by Alarm:

Two options are available: Disabled or Enabled. The default setting is *Disabled.* When set to *Enabled*, you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

✻ Date (of Month) / Resume Time (hh:mm:ss):

You can set the Date (month) Alarm and Time Alarm (hh:mm:ss). Any event occurring will awaken a system that has powered down.

POWER ON Functon:

This item selects the way you want your system to power on.

[Password]: Use a password to power on the system, select this option then press <Enter>. Enter your password. You can enter up to 5 characters. Type in exactly the same password to confirm, and then press <Enter>.

[Hot KEY]: Use any of the function keys between <F1> to <F12> to power on the system.

[Mouse Left]: Double click the mouse left button to power on the system.

[Mouse Right]: Double click the mouse right button to power on the system.

[Any KEY]: Use any keyboard keys to power on the system.

[Button Only]: Use only the power button to power on the system.

[Keyboard 98]: Use the power-on button on the "Keyboard 98" compatible keyboard to power on the system.

NOTE: The mouse wake up function can only be used with the PS/2 mouse, not with the COM port or USB type. Some PS/2 mice cannot wake up the system because of compatible problems. If the specs of your keyboard are too old, it may fail to power on.

✻ KB Power ON Password:

This item sets the password required in order to power on your computer.

NOTE: Do not forget your password, or you will have to clear the CMOS and reset all parameters in order to utilize this function again.

✻ Hot Key Power ON:

This item powers on the system by pressing <Ctrl> key plus one of each function key (<F1> ~ <F12>) simultaneously.

Restore On AC Power Loss:

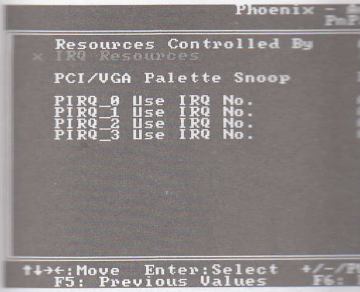
This item selects the system action after an AC power failure.

[Power Off]: When power returns after an AC power failure, the system's power remains off. You must press the Power button to power-on the system.

[Power On]: When power returns after an AC power failure, the system's power will be powered on automatically.

[Last State]: When power returns after an AC power failure, the system will return to the state where you left off before power failure occurs. If the system's power is off when AC power failure occurs, it will remain off when power returns. If the system's power is on when AC power failure occurs, the system will power-on when power returns.

3-7. PnP/PCI Configurati



```
Phoenix -
PnP
Resources Controlled By
× IRQ Resources
PCI/VGA Palette Snoop

PIRQ_0 Use IRQ No.
PIRQ_1 Use IRQ No.
PIRQ_2 Use IRQ No.
PIRQ_3 Use IRQ No.

↑↓→←:Move  Enter:Select  +/-/P
F5: Previous Values      F6:
```

Resources Controlled By:

This item configures all of the boot and Pl

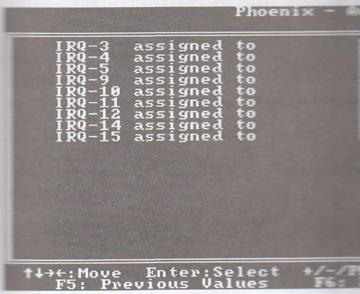
[Auto(ESCD)]: The system will automatic

[Manual]: Choose the specific IRQ resour

✻ IRQ Resources:

Click <Enter> key to enter its submenu:

This item sets each system interrupt to eit



```
Phoenix -

IRQ-3  assigned to
IRQ-4  assigned to
IRQ-5  assigned to
IRQ-9  assigned to
IRQ-10 assigned to
IRQ-11 assigned to
IRQ-12 assigned to
IRQ-14 assigned to
IRQ-15 assigned to

↑↓→←:Move  Enter:Select  +/-/P
F5: Previous Values      F6:
```

➥ Back to PnP/PCI Configura

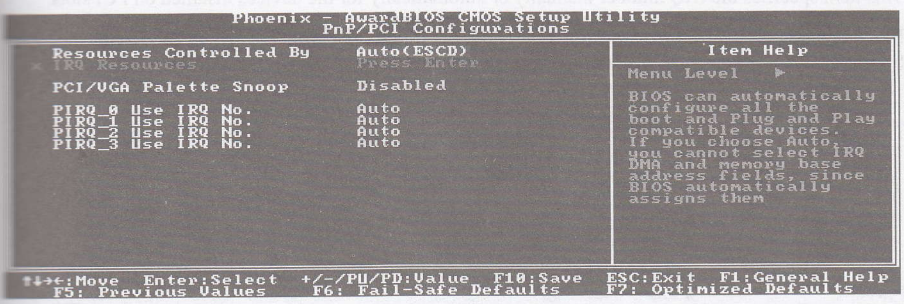
PCI/VGA Palette Snoop:

This item determines whether the MPEG I

[Enabled]: MPEG ISA/VESA VGA card

[Disabled]: MPEG ISA/VESA VGA card

3-7. PnP/PCI Configurations



```
                Phoenix - AwardBIOS CMOS Setup Utility
                        PnP/PCI Configurations
  Resources Controlled By    Auto(ESCD)      |        Item Help
x IRQ Resources              Press Enter     | Menu Level   ►
  PCI/VGA Palette Snoop      Disabled        |
                                             | BIOS can automatically
  PIRQ_0 Use IRQ No.         Auto            | configure all the
  PIRQ_1 Use IRQ No.         Auto            | boot and Plug and Play
  PIRQ_2 Use IRQ No.         Auto            | compatible devices.
  PIRQ_3 Use IRQ No.         Auto            | If you choose Auto,
                                             | you cannot select IRQ
                                             | DMA and memory base
                                             | address fields, since
                                             | BIOS automatically
                                             | assigns them
 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults     F7: Optimized Defaults
```

Resources Controlled By:

This item configures all of the boot and Plug-and-Play compatible devices.

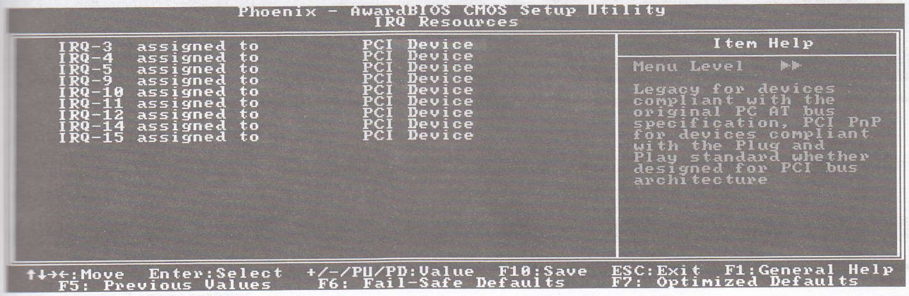
[Auto(ESCD)]: The system will automatically detect the settings.

[Manual]: Choose the specific IRQ resources in the "IRQ Resources" menu.

* **IRQ Resources:**

Click <Enter> key to enter its submenu:

This item sets each system interrupt to either [PCI Device] or [Reserved].



```
                Phoenix - AwardBIOS CMOS Setup Utility
                            IRQ Resources
  IRQ-3  assigned to         PCI Device      |        Item Help
  IRQ-4  assigned to         PCI Device      | Menu Level   ►►
  IRQ-5  assigned to         PCI Device      |
  IRQ-9  assigned to         PCI Device      | Legacy for devices
  IRQ-10 assigned to         PCI Device      | compliant with the
  IRQ-11 assigned to         PCI Device      | original PC AT bus
  IRQ-12 assigned to         PCI Device      | specification, PCI PnP
  IRQ-14 assigned to         PCI Device      | for devices compliant
  IRQ-15 assigned to         PCI Device      | with the Plug and
                                             | Play standard whether
                                             | designed for PCI bus
                                             | architecture
 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults     F7: Optimized Defaults
```

➩ Back to PnP/PCI Configurations Setup Menu:

PCI/VGA Palette Snoop:

This item determines whether the MPEG ISA/VESA VGA cards can work with PCI/VGA or not.

[Enabled]: MPEG ISA/VESA VGA cards work with PCI/VGA.

[Disabled]: MPEG ISA/VESA VGA cards do not work with PCI/VGA.

PIRQ_0 Use IRQ No. ~ PIRQ_3 Use IRQ No.:

This item specifies the IRQ number manually or automatically for the devices installed on PCI slots.

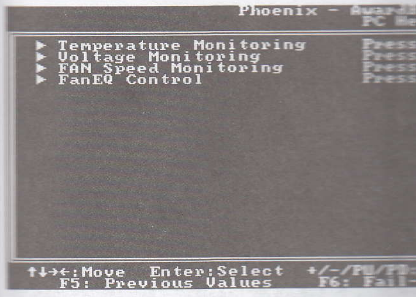
For the relations between the hardware layout of PIRQ (the signals from the VIA VT8237 chipset), INT# (means PCI slot IRQ signals) and devices, please refer to the table below:

Signals	AGP	LAN	PCI-1	PCI-2	PCI-3	PCI-4	PCI-5	SATA	1394
PIRQ_0 Assignment	INT A	INT B	INT A	INT B	INT C	INT D	INT A	INT A	INT D
PIRQ_1 Assignment	INT B		INT B	INT C	INT D	INT A	INT B		
PIRQ_2 Assignment			INT C	INT D	INT A	INT B	INT C		
PIRQ_3 Assignment			INT D	INT A	INT B	INT C	INT D		

NOTE:

- PCI slot 1 shares IRQ signals with AGP slot, SATA, and PCI-5.
- If you want to install two PCI cards into those PCI slots that share IRQ with one another at the same time, you must make sure that your OS and PCI devices' driver supports the IRQ sharing function.

3-8. PC Health Status

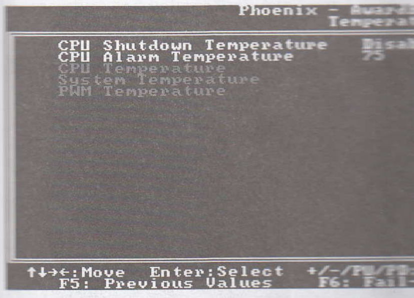


```
                               Phoenix - Award
                                          PC He
   ▶ Temperature Monitoring               Press
   ▶ Voltage Monitoring                   Press
   ▶ FAN Speed Monitoring                 Press
   ▶ FanEQ Control                        Press

 ↑↓→←:Move  Enter:Select  +/-/PU/PD
    F5: Previous Values      F6: Fail-
```

Temperature Monitoring:

Click <Enter> key to enter its submenu:



```
                               Phoenix - Award
                                      Temperat
     CPU Shutdown Temperature            Disa
     CPU Alarm Temperature               75
     CPU Temperature
     System Temperature
     PWM Temperature

 ↑↓→←:Move  Enter:Select  +/-/PU/PD
    F5: Previous Values      F6: Fail-
```

CPU Shutdown Temperature:

This item sets the temperature that would shutd overheats.

NOTE: The CPU shutdown temperature limit m

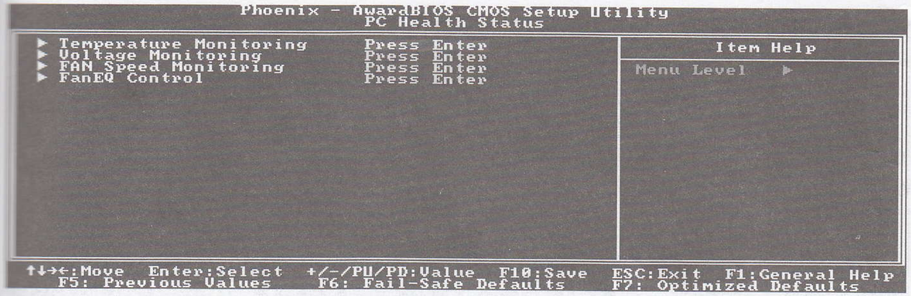
CPU Alarm Temperature:

This item selects the CPU's warning temperat temperature exceeded the limit, warning beeps w

CPU Temperature/SYS Temperature/PWM T

These items display the temperature of CPU, Sy

3-8. PC Health Status

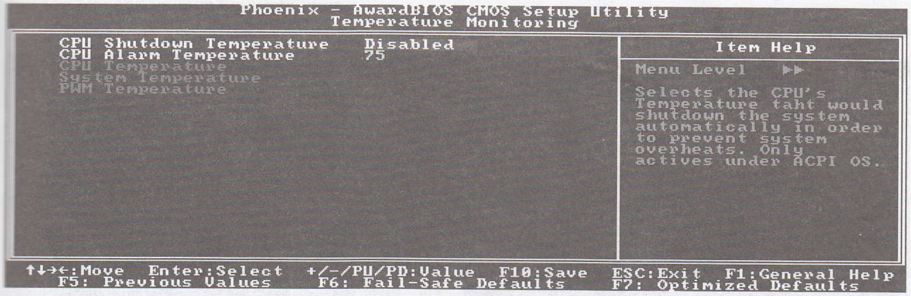


```
                 Phoenix - AwardBIOS CMOS Setup Utility
                            PC Health Status
 ▶ Temperature Monitoring       Press Enter    |        Item Help
 ▶ Voltage Monitoring           Press Enter    |  Menu Level   ▶
 ▶ FAN Speed Monitoring         Press Enter    |
 ▶ FanEQ Control                Press Enter    |

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults     F7: Optimized Defaults
```

➭ Temperature Monitoring:

Click <Enter> key to enter its submenu:



```
                 Phoenix - AwardBIOS CMOS Setup Utility
                         Temperature Monitoring
 CPU Shutdown Temperature      Disabled        |        Item Help
 CPU Alarm Temperature         75              |  Menu Level   ▶▶
 CPU Temperature                               |
 System Temperature                            |  Selects the CPU's
 PWM Temperature                               |  Temperature taht would
                                               |  shutdown the system
                                               |  automatically in order
                                               |  to prevent system
                                               |  overheats. Only
                                               |  actives under ACPI OS.

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults     F7: Optimized Defaults
```

CPU Shutdown Temperature:

This item sets the temperature that would shutdown the system automatically in order to prevent system overheats.

NOTE: The CPU shutdown temperature limit must be higher than the CPU alarm temperature limit.

CPU Alarm Temperature:

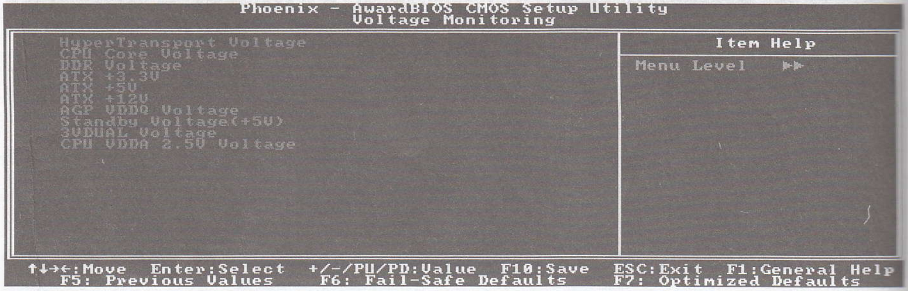
This item selects the CPU's warning temperature limit. Once the system has detected that the CPU's temperature exceeded the limit, warning beeps will sound.

CPU Temperature/SYS Temperature/PWM Temperature:

These items display the temperature of CPU, System, and Power Module.

Voltage Monitoring:

Click <Enter> key to enter its submenu:



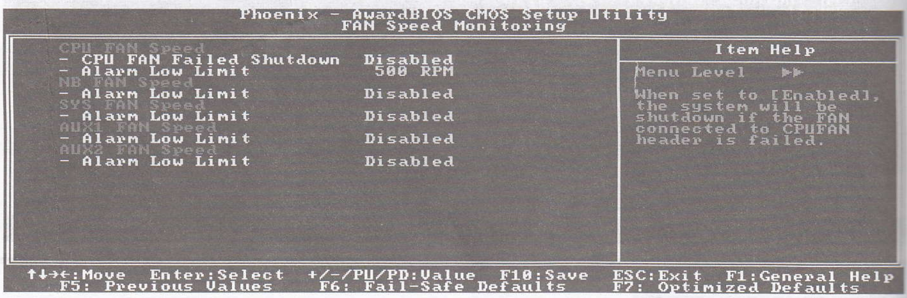
```
            Phoenix - AwardBIOS CMOS Setup Utility
                     Voltage Monitoring
    HyperTransport Voltage                       Item Help
    CPU Core Voltage                       Menu Level    ▶▶
    DDR Voltage
    ATX +3.3V
    ATX +5V
    ATX +12V
    AGP VDDQ Voltage
    Standby Voltage(+5V)
    3VDUAL Voltage
    CPU VDDA 2.5V Voltage

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

These items display the voltage of each element.

FAN Speed Monitoring:

Click <Enter> key to enter its submenu:



```
            Phoenix - AwardBIOS CMOS Setup Utility
                    FAN Speed Monitoring
    CPU FAN Speed                                Item Help
    - CPU FAN Failed Shutdown   Disabled   Menu Level    ▶▶
    - Alarm Low Limit            500 RPM
    NB FAN Speed                           When set to [Enabled],
    - Alarm Low Limit           Disabled   the system will be
    SYS FAN Speed                          shutdown if the FAN
    - Alarm Low Limit           Disabled   connected to CPUFAN
    AUX1 FAN Speed                         header is failed.
    - Alarm Low Limit           Disabled
    AUX2 FAN Speed
    - Alarm Low Limit           Disabled

↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
   F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

CPU/NB/SYS/AUX1/AUX2 FAN Speed:

These items display the speed of the fans connected to CPU, NB, SYS, AUX1 and AUX2 FAN headers.

❈ CPU FAN Failed Shutdown

When set to [Enabled], the system will be shut down if the fan connected to CPUFAN header is failed.

❈ Alarm Low Limit

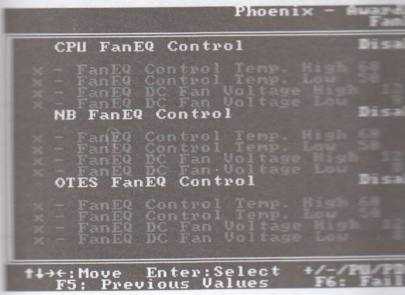
These items controls the system to alert by alarm if the fan speed is running below the limit specified in these options.

NOTE:

- Only the fans with 3-pin plugs provide the speed monitoring function.
- The OTES fan connector is attached with the SYSTEM1 fan connector on the motherboard. Therefore, the SYS FAN Speed displayed here represents the OTES fan speed.

FanEQ Control:

Click <Enter> key to enter its submenu:



```
                      Phoenix - Award
                                Fan
    CPU FanEQ Control                  Disa

 x  - FanEQ Control Temp. High 60
 x  - FanEQ Control Temp. Low  50
 x  - FanEQ DC Fan Voltage High  12
 x  - FanEQ DC Fan Voltage Low    0
    NB FanEQ Control                   Disa

 x  - FanEQ Control Temp. High 60
 x  - FanEQ Control Temp. Low  50
 x  - FanEQ DC Fan Voltage High  12
 x  - FanEQ DC Fan Voltage Low    0
    OTES FanEQ Control                 Disa

 x  - FanEQ Control Temp. High 60
 x  - FanEQ Control Temp. Low  50
 x  - FanEQ DC Fan Voltage High  12
 x  - FanEQ DC Fan Voltage Low    0

↑↓→←:Move  Enter:Select  +/-/PU/PD
   F5: Previous Values     F6: Fail
```

CPU FanEQ Control:

When set to [Enabled], this item allows you t
temperature and voltage high/low limit.

❈ FanEQ Control Temp. High/Low

This item sets the high and low temperature lim

❈ FanEQ DC Fan Voltage High/Low

This item sets the high and low voltage limit th

NOTE: The value of high limit must be higher

NB FanEQ Control:

When set to [Enabled], this item allows you t
temperature and voltage high/low limit.

❈ FanEQ Control Temp. High/Low

This item sets the high and low temperature lim

❈ FanEQ DC Fan Voltage High/Low

This item sets the high and low voltage limit th

NOTE: The value of high limit must be higher

OTES FanEQ Control:

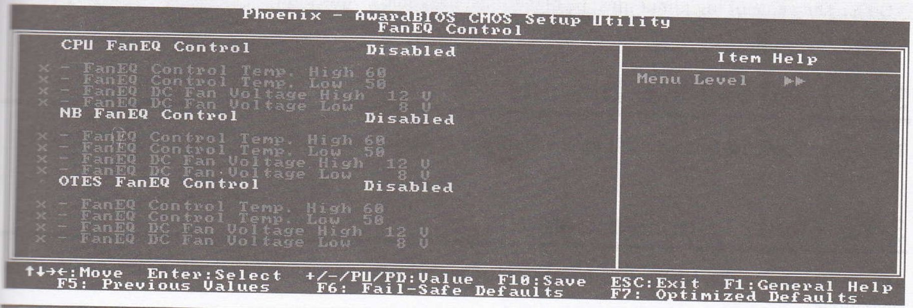
When set to [Enabled], this item allows you t
temperature and voltage high/low limit.

❈ FanEQ Control Temp. High/Low

This item sets the high and low temperature lim

FanEQ Control:

Click <Enter> key to enter its submenu:



```
                    Phoenix - AwardBIOS CMOS Setup Utility
                                FanEQ Control
   CPU FanEQ Control                  Disabled
 x - FanEQ Control Temp. High 60                        Item Help
 x - FanEQ Control Temp. Low  50                    Menu Level   ▶▶
 x - FanEQ DC Fan Voltage High  12 V
 x - FanEQ DC Fan Voltage Low    8 V
   NB FanEQ Control                   Disabled
 x - FanEQ Control Temp. High 60
 x - FanEQ Control Temp. Low  50
 x - FanEQ DC Fan Voltage High  12 V
 x - FanEQ DC Fan Voltage Low    8 V
   OTES FanEQ Control                 Disabled
 x - FanEQ Control Temp. High 60
 x - FanEQ Control Temp. Low  50
 x - FanEQ DC Fan Voltage High  12 V
 x - FanEQ DC Fan Voltage Low    8 V
 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
    F5: Previous Values     F6: Fail-Safe Defaults    F7: Optimized Defaults
```

CPU FanEQ Control:

When set to [Enabled], this item allows you to control the CPU fan speed by its setting combination of temperature and voltage high/low limit.

- **FanEQ Control Temp. High/Low**

This item sets the high and low temperature limit that you want to do the fan speed control.

- **FanEQ DC Fan Voltage High/Low**

This item sets the high and low voltage limit that you want to provide the fan with.

NOTE: The value of high limit must be higher than the value of low limit.

NB FanEQ Control:

When set to [Enabled], this item allows you to control the NB fan speed by its setting combination of temperature and voltage high/low limit.

- **FanEQ Control Temp. High/Low**

This item sets the high and low temperature limit that you want to do the fan speed control.

- **FanEQ DC Fan Voltage High/Low**

This item sets the high and low voltage limit that you want to provide the fan with.

NOTE: The value of high limit must be higher than the value of low limit.

OTES FanEQ Control:

When set to [Enabled], this item allows you to control the OTES fan speed by its setting combination of temperature and voltage high/low limit.

- **FanEQ Control Temp. High/Low**

This item sets the high and low temperature limit that you want to do the fan speed control.

❋ **FanEQ DC Fan Voltage High/Low**

This item sets the high and low voltage limit that you want to provide the fan with.

NOTE: The value of high limit must be higher than the value of low limit.

3-9. Load Fail-Safe Defaults

This option loads the BIOS default values for the most stable, minimal-performance system operations.

3-10. Load Optimized Defaults

This option loads the BIOS default values that are factory settings for optimal-performance system operations.

3-11. Set Password

This option protects the BIOS configuration or restricts access to the computer itself.

3-12. Save & Exit Setup

This option saves your selections and exits the BIOS setup menu.

3-13. Exit Without Saving

This option exits the BIOS setup menu without saving any change.

provide the fan with.

e of low limit.

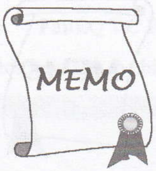
, minimal-performance system operations.

y settings for optimal-performance system

s to the computer itself.

enu.

ange.



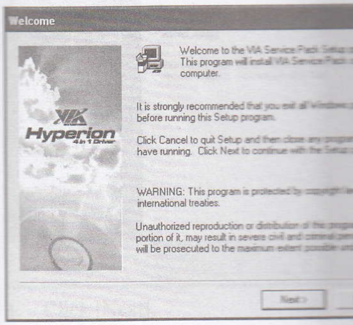
Appendix A. Install V

NOTE: Please install this VIA 4-in-1 d

The installation procedures and screen s
this section are based on Windows XP op
system. For those of other OS, please fol
on-screen instruction.

Insert the Driver & Utility CD into CD
drive, it should execute the installation p
automatically. If not, double-click the ex
file at the main directory of this CD to e
installation menu.

After entering the installation menu, mov
curser to [Drivers] tab. Click [VIA 4in1 D
The following screen appears.



Welcome to the VIA Service Pack Setu
This program will install VIA Service Pack
computer.

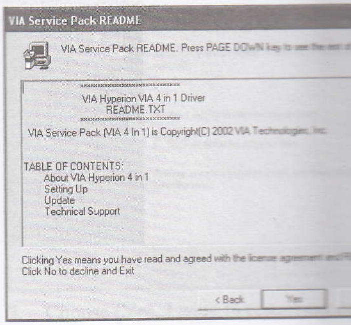
It is strongly recommended that you exit all window
before running this Setup program.

Click Cancel to quit Setup and then close any progra
have running. Click Next to continue with the Setup

WARNING: This program is protected by copyright la
international treaties.

Unauthorized reproduction or distribution of this progra
portion of it, may result in severe civil and criminal pen
will be prosecuted to the maximum extent possible un

1. Click [Next].



VIA Service Pack README. Press PAGE DOWN key to see the rest o

```
******************************
VIA Hyperion VIA 4 in 1 Driver
README.TXT
******************************
VIA Service Pack (VIA 4 In 1) is Copyright(C) 2002 VIA Technologies, Inc.

TABLE OF CONTENTS:
    About VIA Hyperion 4 in 1
    Setting Up
    Update
    Technical Support
```

Clicking Yes means you have read and agreed with the license agreement and
Click No to decline and Exit

2. Click [Yes].

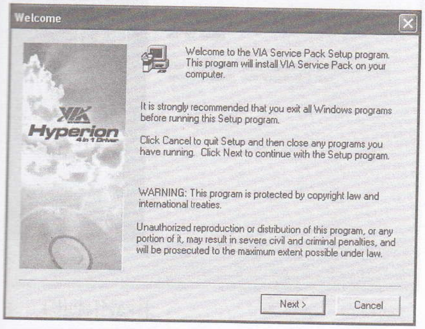
Appendix A. Install VIA 4-in-1 Driver

NOTE: Please install this VIA 4-in-1 driver first after having installed the Windows operating system.

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

After entering the installation menu, move your curser to [Drivers] tab. Click [VIA 4in1 Driver]. The following screen appears.



Welcome to the VIA Service Pack Setup program. This program will install VIA Service Pack on your computer.

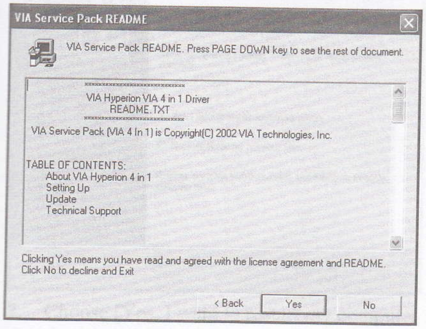
It is strongly recommended that you exit all Windows programs before running this Setup program.

Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.

WARNING: This program is protected by copyright law and international treaties.

Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.

1. Click [Next].



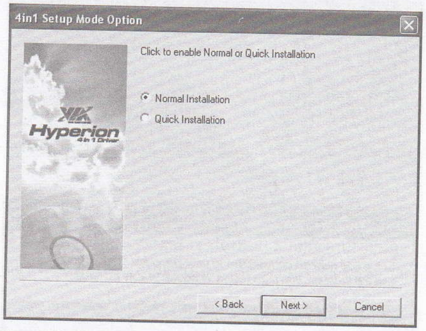
VIA Service Pack README. Press PAGE DOWN key to see the rest of document.

```
          ****************************
          VIA Hyperion VIA 4 in 1 Driver
                README.TXT
          ****************************
VIA Service Pack (VIA 4 In 1) is Copyright(C) 2002 VIA Technologies, Inc.

TABLE OF CONTENTS:
     About VIA Hyperion 4 in 1
     Setting Up
     Update
     Technical Support
```

Clicking Yes means you have read and agreed with the license agreement and README.
Click No to decline and Exit

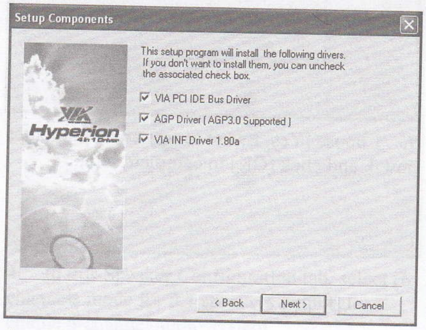
2. Click [Yes].



Click to enable Normal or Quick Installation

● Normal Installation
○ Quick Installation

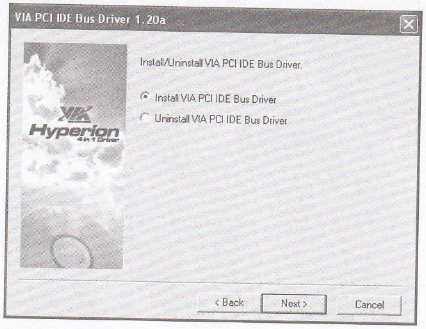
3. Click [Next].



This setup program will install the following drivers. If you don't want to install them, you can uncheck the associated check box.

☑ VIA PCI IDE Bus Driver
☑ AGP Driver (AGP3.0 Supported)
☑ VIA INF Driver 1.80a

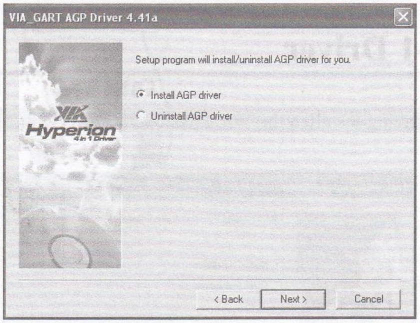
4. Click [Next].



Install/Uninstall VIA PCI IDE Bus Driver.

● Install VIA PCI IDE Bus Driver
○ Uninstall VIA PCI IDE Bus Driver

5. Click [Next].

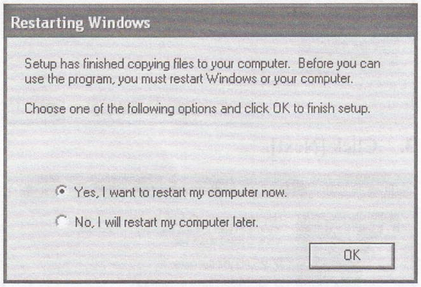


Setup program will install/uninstall AGP driver for you.

● Install AGP driver

○ Uninstall AGP driver

6. Click [Next].



Setup has finished copying files to your computer. Before you can use the program, you must restart Windows or your computer.

Choose one of the following options and click OK to finish setup.

● Yes, I want to restart my computer now.

○ No, I will restart my computer later.

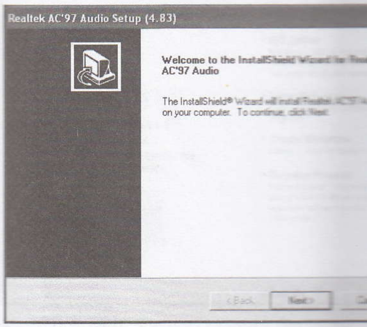
7. Choose [Yes, I want to restart my computer now.], and click [OK] to complete setup.

Appendix B. Install A

The installation procedures and screen sh
this section are based on Windows XP ope
system. For those of other OS, please foll
on-screen instruction.

Insert the Driver & Utility CD into CD-
drive, it should execute the installation pro
automatically. If not, double-click the exec
file at the main directory of this CD to ent
installation menu.

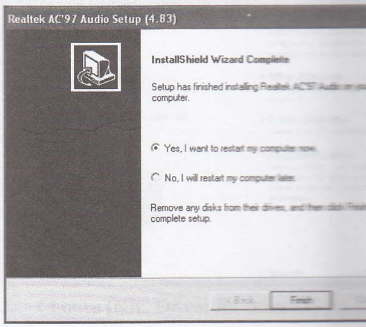
After entering the installation menu, move
curser to [Drivers] tab. Click [Audio D
The following screen appears.



Welcome to the InstallShield Wizard for Rea
AC'97 Audio

The InstallShield® Wizard will install Realtek AC'97
on your computer. To continue, click Next.

1. Click [Next].



InstallShield Wizard Complete

Setup has finished installing Realtek AC'97 Audio on
computer.

● Yes, I want to restart my computer now.

○ No, I will restart my computer later.

Remove any disks from their drives, and then click Finis
complete setup.

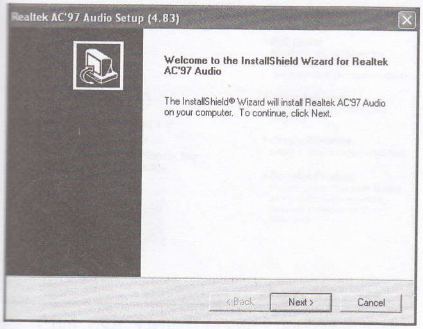
2. Choose [Yes, I want to restart my com
now.], and click [Finish] to complete setup

Appendix B. Install Audio Driver

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

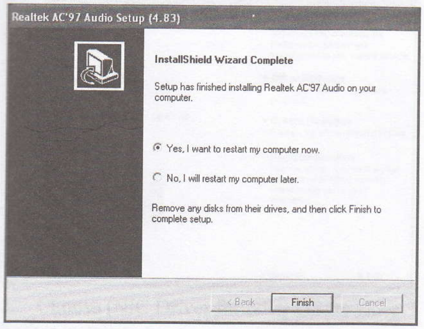
After entering the installation menu, move your curser to [Drivers] tab. Click [Audio Driver]. The following screen appears.



Welcome to the InstallShield Wizard for Realtek AC'97 Audio

The InstallShield® Wizard will install Realtek AC'97 Audio on your computer. To continue, click Next.

1. Click [Next].



InstallShield Wizard Complete

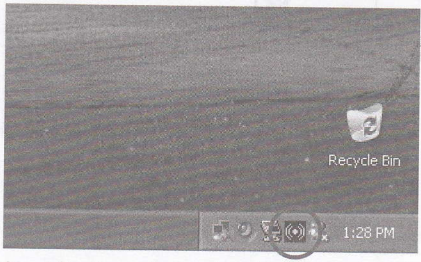
Setup has finished installing Realtek AC'97 Audio on your computer.

● Yes, I want to restart my computer now.

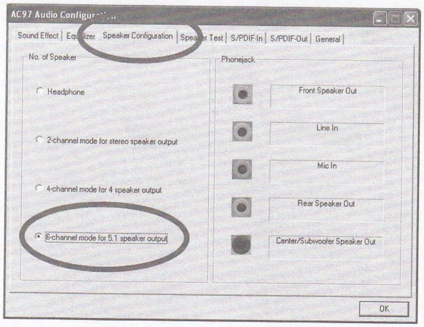
○ No, I will restart my computer later.

Remove any disks from their drives, and then click Finish to complete setup.

2. Choose [Yes, I want to restart my computer now.], and click [Finish] to complete setup.



3. After the system restarted, a shortcut icon appears at the right corner of Windows task bar.



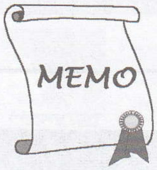
○ Headphone

○ 2-channel mode for stereo speaker output

○ 4-channel mode for 4 speaker output

● 6-channel mode for 5.1 speaker output

4. In this Speaker Configuration tab, select [6 channels mode for 5.1 speakers output] to enable 6-channel audio system

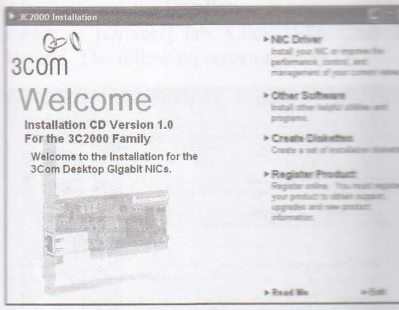


Appendix C. Install LA

The installation procedures and screen shots this section are based on Windows XP operatin system. For those of other OS, please follow i on-screen instruction.

Insert the Driver & Utility CD into CD-RO drive, it should execute the installation progra automatically. If not, double-click the executi file at the main directory of this CD to enter t installation menu.

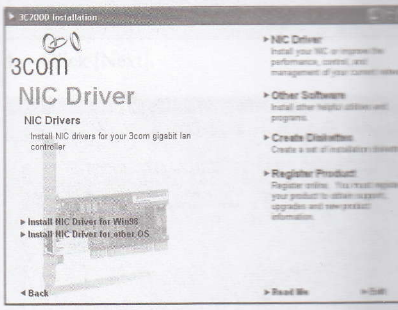
After entering the installation menu, move yo curser to [Drivers] tab. Click [LAN Driver]. T following screen appears.



Installation CD Version 1.0
For the 3C2000 Family

Welcome to the Installation for the 3Com Desktop Gigabit NICs.

1. Click [NIC Driver] to enter the installatio



NIC Drivers

Install NIC drivers for your 3com gigabit lan controller

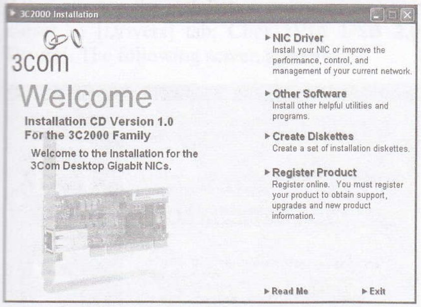
2. Choose [NIC Driver for other OS] to ente further installation.

Appendix C. Install LAN Driver

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

After entering the installation menu, move your curser to [Drivers] tab. Click [LAN Driver]. The following screen appears.



Welcome

Installation CD Version 1.0
For the 3C2000 Family

Welcome to the Installation for the 3Com Desktop Gigabit NICs.

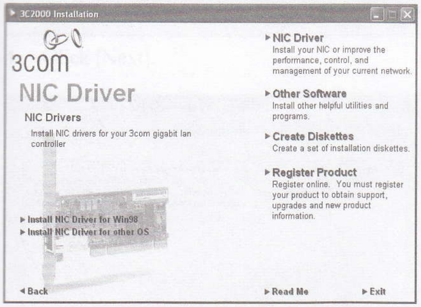
▸ **NIC Driver**
Install your NIC or improve the performance, control, and management of your current network.

▸ **Other Software**
Install other helpful utilities and programs.

▸ **Create Diskettes**
Create a set of installation diskettes.

▸ **Register Product**
Register online. You must register your product to obtain support, upgrades and new product information.

1. Click [NIC Driver] to enter the installation.



NIC Driver

NIC Drivers

Install NIC drivers for your 3com gigabit lan controller

▸ Install NIC Driver for Win98
▸ Install NIC Driver for other OS

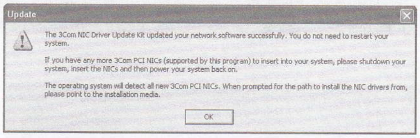
▸ **NIC Driver**
Install your NIC or improve the performance, control, and management of your current network.

▸ **Other Software**
Install other helpful utilities and programs.

▸ **Create Diskettes**
Create a set of installation diskettes.

▸ **Register Product**
Register online. You must register your product to obtain support, upgrades and new product information.

2. Choose [NIC Driver for other OS] to enter further installation.

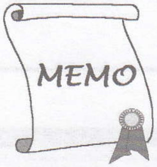


The 3Com NIC Driver Update Kit updated your network software successfully. You do not need to restart your system.

If you have any more 3Com PCI NICs (supported by this program) to insert into your system, please shutdown your system, insert the NICs and then power your system back on.

The operating system will detect all new 3Com PCI NICs. When prompted for the path to install the NIC drivers from, please point to the installation media.

3. Click [OK] to exit the installation.



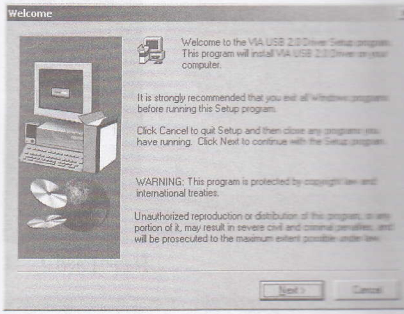
Appendix D. Install VIA

NOTE: There is no need to install VIA US
Service Pack 1 already installed. Please run the

The installation procedures and screen shots i
this section are based on Windows 200
operating system. For those of other OS, pleas
follow its on-screen instruction.

Insert the Driver & Utility CD into CD-RO
drive, it should execute the installation prograr
automatically. If not, double-click the executio
file at the main directory of this CD to enter th
installation menu.

After entering the installation menu, move you
curser to [Drivers] tab. Click [VIA USB 2.
Driver]. The following screen appears.


Welcome

Welcome to the VIA USB 2.0 Driver Setup program. This program will install VIA USB 2.0 Driver on your computer.

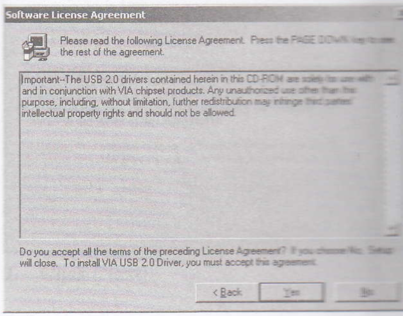
It is strongly recommended that you exit all Windows programs before running this Setup program.

Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.

WARNING: This program is protected by copyright law and international treaties.

Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.

1. Click [Next].


Software License Agreement

Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.

Important--The USB 2.0 drivers contained herein in this CD-ROM are solely for use with and in conjunction with VIA chipset products. Any unauthorized use other than this purpose, including, without limitation, further redistribution may infringe third parties' intellectual property rights and should not be allowed.

Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install VIA USB 2.0 Driver, you must accept this agreement.

2. Click [Yes].

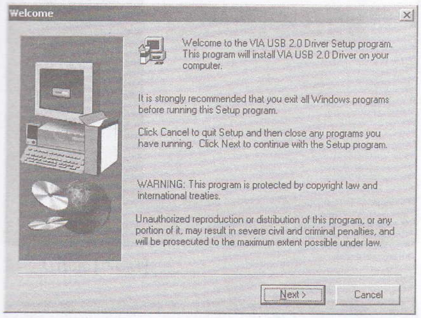
Appendix D. Install VIA USB 2.0 Driver

NOTE: There is no need to install VIA USB 2.0 driver for the Windows XP operating system with Service Pack 1 already installed. Please run the Windows update for the latest Service Pack.

The installation procedures and screen shots in this section are based on Windows 2000 operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

After entering the installation menu, move your curser to [Drivers] tab. Click [VIA USB 2.0 Driver]. The following screen appears.



Welcome to the VIA USB 2.0 Driver Setup program. This program will install VIA USB 2.0 Driver on your computer.

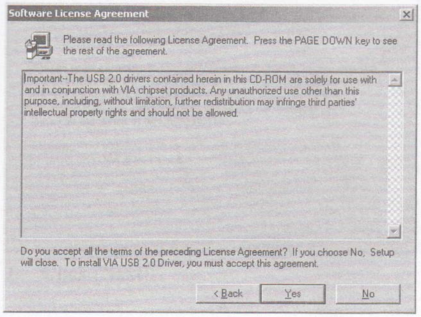
It is strongly recommended that you exit all Windows programs before running this Setup program.

Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.

WARNING: This program is protected by copyright law and international treaties.

Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.

1. Click [Next].

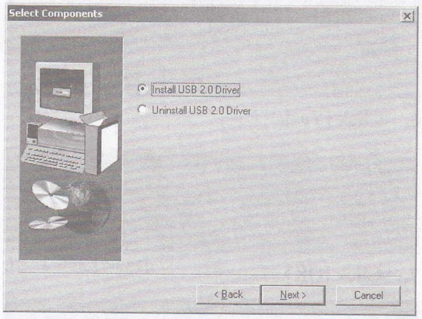


Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.

Important--The USB 2.0 drivers contained herein in this CD-ROM are solely for use with and in conjunction with VIA chipset products. Any unauthorized use other than this purpose, including, without limitation, further redistribution may infringe third parties' intellectual property rights and should not be allowed.

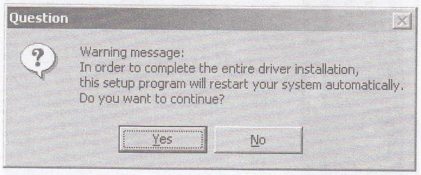
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install VIA USB 2.0 Driver, you must accept this agreement.

2. Click [Yes].



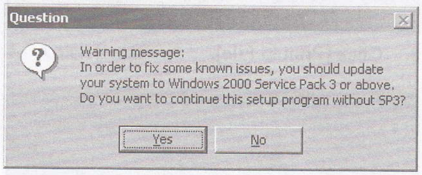
● Install USB 2.0 Driver
○ Uninstall USB 2.0 Driver

3. Click [Next].



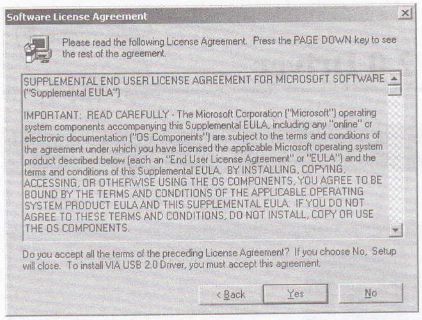
Warning message:
In order to complete the entire driver installation, this setup program will restart your system automatically.
Do you want to continue?

4. Click [Yes].



Warning message:
In order to fix some known issues, you should update your system to Windows 2000 Service Pack 3 or above.
Do you want to continue this setup program without SP3?

5. Click [Yes].



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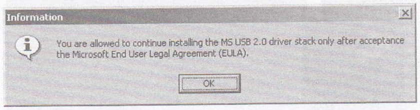
IMPORTANT: READ CAREFULLY - The Microsoft Corporation ("Microsoft") operating system components accompanying this Supplemental EULA, including any "online" or electronic documentation ("OS Components") are subject to the terms and conditions of the agreement under which you have licensed the applicable Microsoft operating system product described below (each an "End User License Agreement" or "EULA") and the terms and conditions of this Supplemental EULA. BY INSTALLING, COPYING, ACCESSING, OR OTHERWISE USING THE OS COMPONENTS, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE APPLICABLE OPERATING SYSTEM PRODUCT EULA AND THIS SUPPLEMENTAL EULA. IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS, DO NOT INSTALL, COPY OR USE THE OS COMPONENTS.

Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install VIA USB 2.0 Driver, you must accept this agreement.

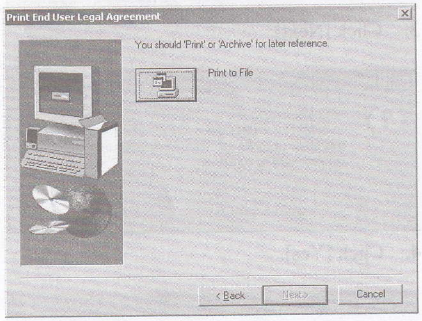
6. Click [Yes].



Information

You are allowed to continue installing the MS USB 2.0 driver stack only after acceptance the Microsoft End User Legal Agreement (EULA).

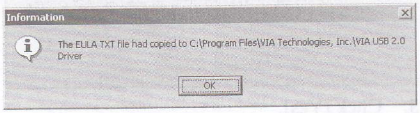
7. Click [OK].



Print End User Legal Agreement

You should 'Print' or 'Archive' for later reference.

8. Click [Print to File].



Information

The EULA TXT File had copied to C:\Program Files\VIA Technologies, Inc.\VIA USB 2.0 Driver

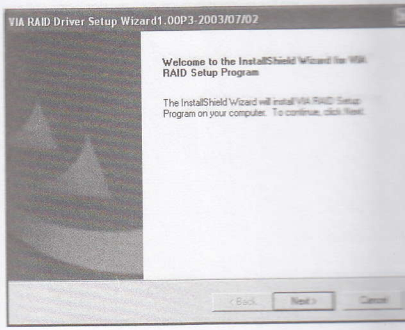
9. Click [OK].

Appendix E. Install VIA

The installation procedures and screen shots i this section are based on Windows XP operatin system. For those of other OS, please follow i on-screen instruction.

Insert the Driver & Utility CD into CD-RO drive, it should execute the installation progra automatically. If not, double-click the executio file at the main directory of this CD to enter th installation menu.

After entering the installation menu, move you curser to [Drivers] tab. Click [VIA SATA RAI Driver]. The following screen appears.

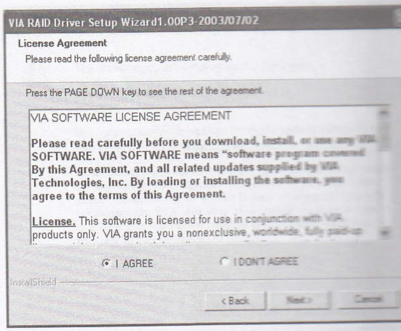


VIA RAID Driver Setup Wizard1.00P3-2003/07/02

Welcome to the InstallShield Wizard for VIA RAID Setup Program

The InstallShield Wizard will install VIA RAID Setup Program on your computer. To continue, click Next.

1. Click [Next].



VIA RAID Driver Setup Wizard1.00P3-2003/07/02

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● I AGREE ○ I DONT AGREE

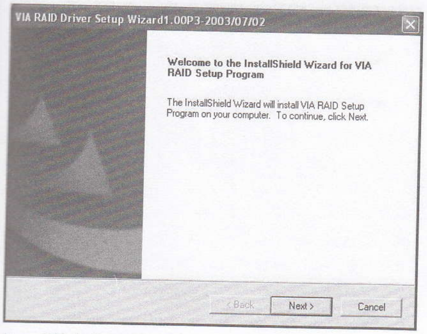
2. Click [Next].

Appendix E. Install VIA Serial ATA RAID Driver

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

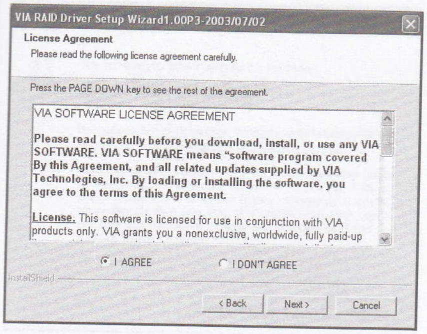
After entering the installation menu, move your curser to [Drivers] tab. Click [VIA SATA RAID Driver]. The following screen appears.



Welcome to the InstallShield Wizard for VIA RAID Setup Program

The InstallShield Wizard will install VIA RAID Setup Program on your computer. To continue, click Next.

1. Click [Next].



License Agreement

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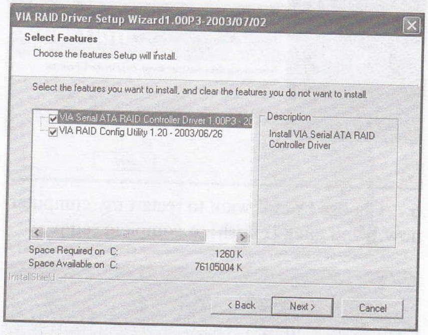
License. This software is licensed for use in conjunction with VIA products only. VIA grants you a nonexclusive, worldwide, fully paid-up

● I AGREE ○ I DON'T AGREE

2. Click [Next].



Select Features

Choose the features Setup will install.

Select the features you want to install, and clear the features you do not want to install.

☑ VIA Serial ATA RAID Controller Driver 1.00P3 - 20

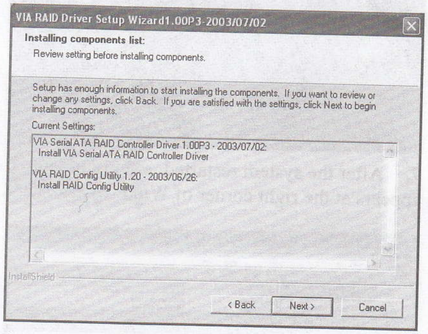
☑ VIA RAID Config Utility 1.20 - 2003/06/26

Install VIA Serial ATA RAID Controller Driver

Space Required on C: 1260 K

Space Available on C: 76105004 K

3. Click [Next].



Installing components list:

Review setting before installing components.

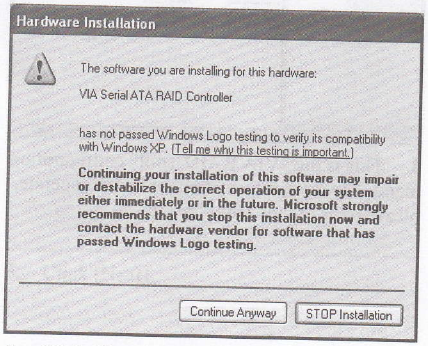
Setup has enough information to start installing the components. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin installing components.

Current Settings:

VIA Serial ATA RAID Controller Driver 1.00P3 - 2003/07/02:
Install VIA Serial ATA RAID Controller Driver

VIA RAID Config Utility 1.20 - 2003/06/26:
Install RAID Config Utility

4. Click [Next].



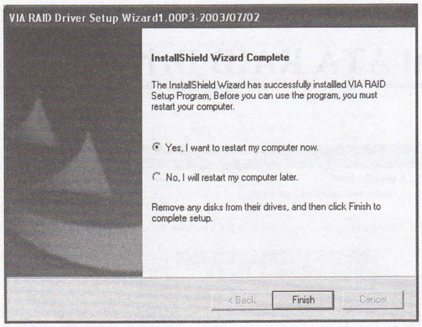
The software you are installing for this hardware:

VIA Serial ATA RAID Controller

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

5. Click [Continue Anyway].



VIA RAID Driver Setup Wizard1.00P3-2003/07/02

InstallShield Wizard Complete

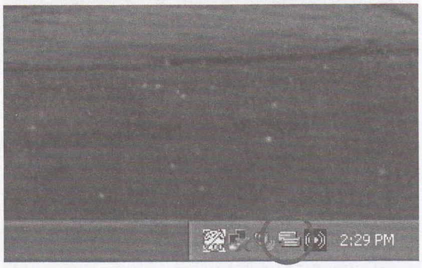
The InstallShield Wizard has successfully installed VIA RAID Setup Program. Before you can use the program, you must restart your computer.

● Yes, I want to restart my computer now.

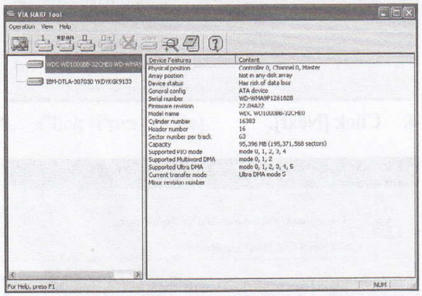
○ No, I will restart my computer later.

Remove any disks from their drives, and then click Finish to complete setup.

6. Choose [Yes, I want to restart my computer now.], and click [Finish] to complete setup.



7. After the system restarted, a shortcut icon appears at the right corner of Windows task bar.



WDC WD1000BB-32CHE0 WD-WMA9

IBM-DTLA-307030 YKDYKGK9133

Device Features	Content
Physical position	Controller 0, Channel 0, Master
Array postion	Not in any disk array
Device status	Has risk of data loss
General config	ATA device
Serial number	WD-WMA9P1261828
Firmware revision	22.04A22
Model name	WDC WD1000BB-32CHE0
Cylinder number	16383
Header number	16
Sector number per track	63
Capacity	95,396 MB (195,371,568 sectors)
Supported PIO mode	mode 0, 1, 2, 3, 4
Supported Multiword DMA	mode 0, 1, 2
Supported Ultra DMA	mode 0, 1, 2, 3, 4, 5
Current transfer mode	Ultra DMA mode 5
Minor revision number	

For Help, press F1

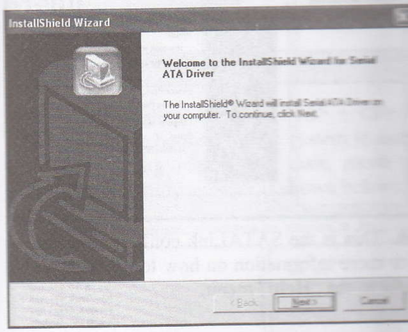
8. This is the "VIA RAID Tool" configuration menu. For more information on how to operate, please refer to the "**Help**" menu.

Appendix F. Install Silico

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the executio file at the main directory of this CD to enter the installation menu.

After entering the installation menu, move you curser to [Drivers] tab. Click [Sil3114 SATA RAID Driver]. The following screen appears.

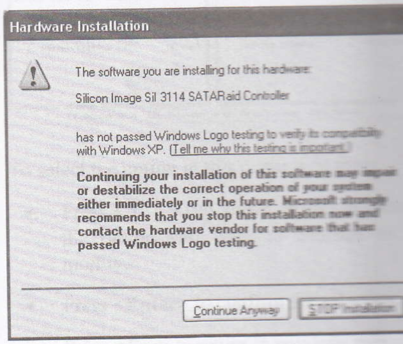


InstallShield Wizard

Welcome to the InstallShield Wizard for Serial ATA Driver

The InstallShield® Wizard will install Serial ATA Driver on your computer. To continue, click Next.

1. Click [Next].



Hardware Installation

The software you are installing for this hardware:

Silicon Image Sil 3114 SATARaid Controller

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

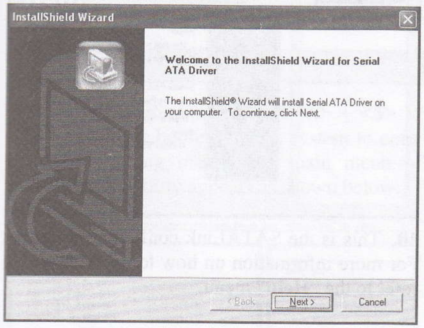
2. Click [Continue Anyway].

Appendix F. Install Silicon Serial ATA RAID Driver

The installation procedures and screen shots in this section are based on Windows XP operating system. For those of other OS, please follow its on-screen instruction.

Insert the Driver & Utility CD into CD-ROM drive, it should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu.

After entering the installation menu, move your curser to [Drivers] tab. Click [Sil3114 SATA RAID Driver]. The following screen appears.

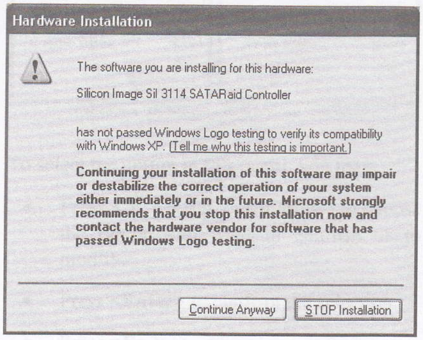


InstallShield Wizard

Welcome to the InstallShield Wizard for Serial ATA Driver

The InstallShield® Wizard will install Serial ATA Driver on your computer. To continue, click Next.

1. Click [Next].



Hardware Installation

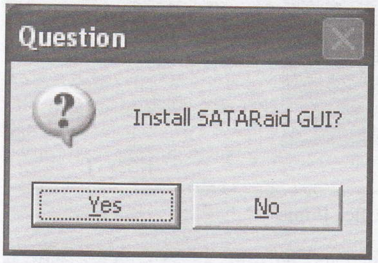
The software you are installing for this hardware:

Silicon Image Sil 3114 SATARaid Controller

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

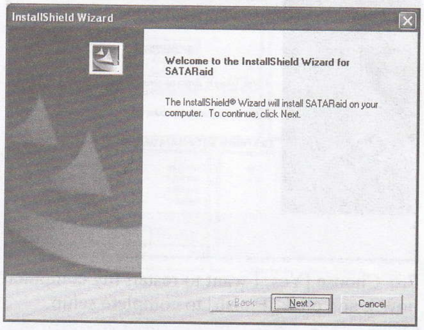
2. Click [Continue Anyway].



Question

Install SATARaid GUI?

3. Click [Yes].

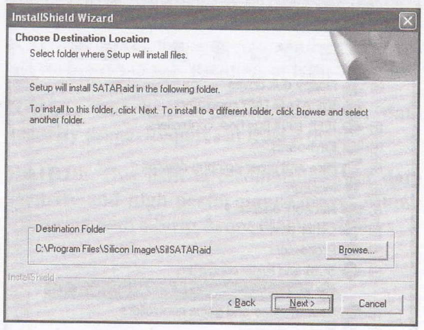


InstallShield Wizard

Welcome to the InstallShield Wizard for SATARaid

The InstallShield® Wizard will install SATARaid on your computer. To continue, click Next.

4. Click [Next].



InstallShield Wizard

Choose Destination Location

Select folder where Setup will install files.

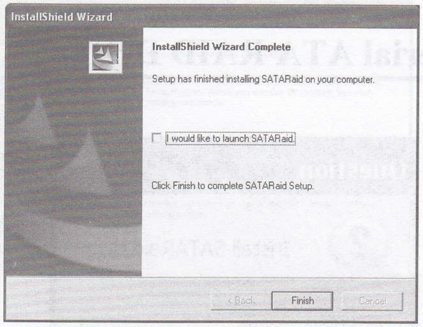
Setup will install SATARaid in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder

C:\Program Files\Silicon Image\SilSATARaid

5. Click [Next].

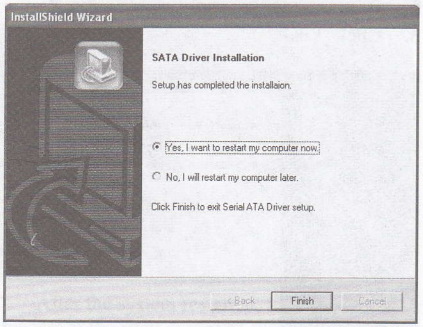


InstallShield Wizard Complete

Setup has finished installing SATARaid on your computer.

Click Finish to complete SATARaid Setup.

6. Click [Finish].



SATA Driver Installation

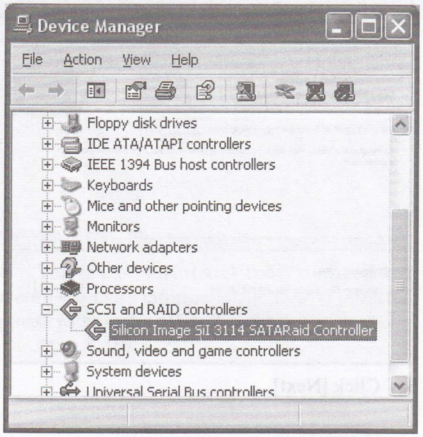
Setup has completed the installaion.

● Yes, I want to restart my computer now.

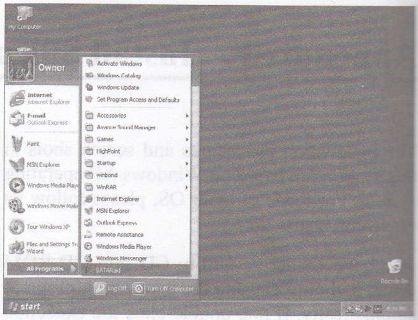
○ No, I will restart my computer later.

Click Finish to exit Serial ATA Driver setup.

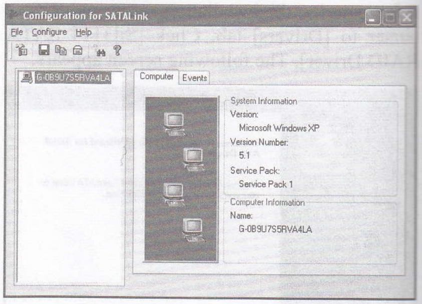
7. Choose [Yes, I want to restart my computer now.], and click [Finish] to complete setup.


Device Manager
File Action View Help
Floppy disk drives
IDE ATA/ATAPI controllers
IEEE 1394 Bus host controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Other devices
Processors
SCSI and RAID controllers
Silicon Image SiI 3114 SATARaid Controller
Sound, video and game controllers
System devices
Universal Serial Bus controllers

8. Check [Device Manager]. [Silicon Image SiI 3114 SATARaid Controller] is successfully installed.



9. To run the [SATARaid] application, click [Start] ➔ [All Programs] ➔ [SATARaid].



System Information
Version:
Microsoft Windows XP
Version Number:
5.1
Service Pack:
Service Pack 1

Computer Information
Name:
G-0B9U7S5RVA4LA

10. This is the SATALink configuration menu. For more information on how to operate, please refer to the "**Help**" menu.

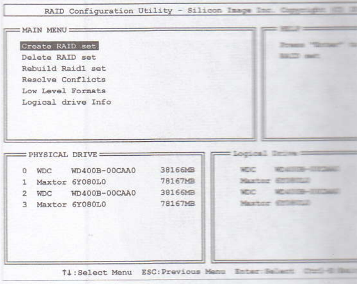
BIOS Setup for Silicon Ser ATA RAID

This motherboard supports the RAID op
of "**Striping (RAID 0)**", "**Mirroring (**
1)", or "**Striping/Mirroring (RAID 0+1**
Silicon Serial ATA controller. For the s
operation, the identical drives can rea
write data in parallel to increase
performance. The Mirroring operation cr
complete backup of your files. Striping
Mirroring operation offers both rea
performance and fault tolerance.

RAID Configuration Utilit Menu

Main Menu

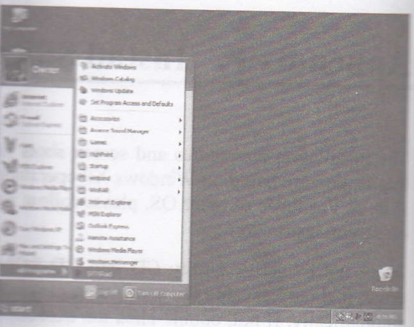
Reboot your system. Press <*CTRL*> +
<*F4*> key while booting up the system
the BIOS setting menu. The main m
BIOS Setting Utility appears as shown be



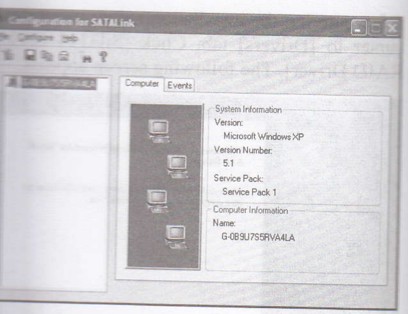
```
        RAID Configuration Utility - Silicon Image Inc.

MAIN MENU

 Create RAID set
 Delete RAID set
 Rebuild Raid1 set
 Resolve Conflicts
 Low Level Formats
 Logical drive Info

PHYSICAL DRIVE
 0  WDC    WD400B-00CAA0    38166MB
 1  Maxtor 6Y080L0          78167MB
 2  WDC    WD400B-00CAA0    38166MB
 3  Maxtor 6Y080L0          78167MB

        ↑↓:Select Menu  ESC:Previous Menu
```

To select the option in this menu, you ma

- Press < ↑ ↓ > (up, down arrow) to
  the option you want to confirm
  modify.
- Press <**Enter**> to confirm the selec
- Press <**Esc**> to return to previous m
- Press <**Ctrl-E**> to exit the
  configuration utility.



. To run the [SATARaid] application, click
Start] → [All Programs] → [SATARaid].



```
System Information
Version:
    Microsoft Windows XP
Version Number:
    5.1
Service Pack:
    Service Pack 1
Computer Information
Name:
    G-0B9U7S5RVA4LA
```

. This is the SATALink configuration menu.
or more information on how to operate, please
fer to the "**Help**" menu.

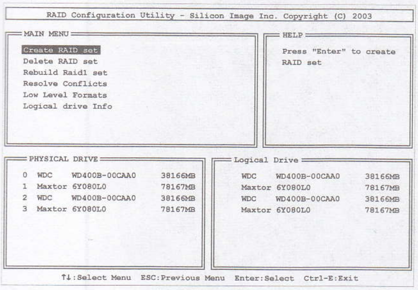
BIOS Setup for Silicon Serial ATA RAID

This motherboard supports the RAID operation of **"Striping (RAID 0)"**, **"Mirroring (RAID 1)"**, or **"Striping/Mirroring (RAID 0+1)"** via Silicon Serial ATA controller. For the striping operation, the identical drives can read and write data in parallel to increase system performance. The Mirroring operation creates a complete backup of your files. Striping with Mirroring operation offers both read/write performance and fault tolerance.

RAID Configuration Utility Menu

Main Menu

Reboot your system. Press *<CTRL>* + *<S>* or *<F4>* key while booting up the system to enter the BIOS setting menu. The main menu of BIOS Setting Utility appears as shown below:



```
         RAID Configuration Utility - Silicon Image Inc. Copyright (C) 2003

MAIN MENU                                         HELP
  Create RAID set                                   Press "Enter" to create
  Delete RAID set                                   RAID set
  Rebuild Raid1 set
  Resolve Conflicts
  Low Level Formats
  Logical drive Info

PHYSICAL DRIVE                            Logical Drive
  0  WDC    WD400B-00CAA0    38166MB        WDC    WD400B-00CAA0    38166MB
  1  Maxtor 6Y080L0          78167MB        Maxtor 6Y080L0          78167MB
  2  WDC    WD400B-00CAA0    38166MB        WDC    WD400B-00CAA0    38166MB
  3  Maxtor 6Y080L0          78167MB        Maxtor 6Y080L0          78167MB

       ↑↓:Select Menu  ESC:Previous Menu  Enter:Select  Ctrl-E:Exit
```

To select the option in this menu, you may:

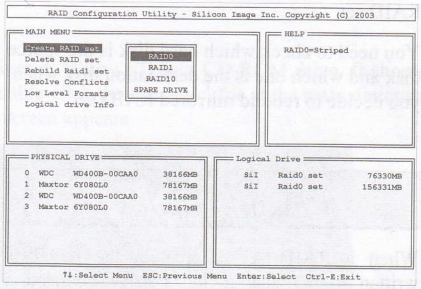
- Press <↑ ↓> (up, down arrow) to choose the option you want to confirm or to modify.
- Press <**Enter**> to confirm the selection.
- Press <**Esc**> to return to previous menu.
- Press <**Ctrl-E**> to exit the RAID configuration utility.

NOTE: If you want to create a RAID 0 (striping) array or RAID 0+1 array, all the data stored in the hard disks will first be erased! Please backup the hard disk data before starting to create these RAID arrays.

If you want to create a RAID 1 (mirroring) array, please make sure which hard disk is the source disk and which one is the destination disk. If you make a mistake, you may copy the blank data to the source disk, which will result in both hard disks becoming blank!

Option 1
Create RAID set

This item allows you to create a RAID array.



```
         RAID Configuration Utility - Silicon Image Inc. Copyright (C) 2003

MAIN MENU                                         HELP
  Create RAID set        RAID0                      RAID0=Striped
  Delete RAID set        RAID1
  Rebuild Raid1 set      RAID10
  Resolve Conflicts    SPARE DRIVE
  Low Level Formats
  Logical drive Info

PHYSICAL DRIVE                            Logical Drive
  0  WDC    WD400B-00CAA0    38166MB        SiI    Raid0 set          76330MB
  1  Maxtor 6Y080L0          78167MB        SiI    Raid0 set         156331MB
  2  WDC    WD400B-00CAA0    38166MB
  3  Maxtor 6Y080L0          78167MB

       ↑↓:Select Menu  ESC:Previous Menu  Enter:Select  Ctrl-E:Exit
```

NOTE: It is highly recommended to attach hard disks with the same model in reaching the RAID performance.

RAID0: This item is recommended for **high performance** usage. Requires at least 2 disks.

RAID1: This item is recommended for **data security** usage. Requires at least 2 disks.

RAID10: This item is recommended for **data security and high performance** usage. Allows Mirroring with a Strip Array. Require 4 disks.

Option 2
Delete RAID set

This item allows you to remove a RAID Array on this onboard Serial ATA RAID controller.

NOTE: After you have made and confirmed this selection, all the data stored in the hard disk will be lost. (The entire partition configuration will be deleted too.)

Option 3
Rebuild Raid1 set

This item allows you to rebuild only "Mirrored" RAID set.

You need to check which hard disk is the source disk and which one is the destination disk when you decide to rebuild mirrored RAID set.

Option 4
Resolve Conflicts

When a RAID set is created, the metadata written to the disk includes drive connection information (Primary Channel, Secondary Channel).

If, after a disk failure, the replacement disk was previously part of a RAID set (or used in another system), it may have conflicting metadata, specifically in reference to the drive connection information. If so, this will prohibit the RAID set from being either created or rebuilt.

In order for the RAID set to function properly, this old metadata must be first overwritten with the new metadata. To resolve this, select "Resolve Conflict". The correct metadata, including the correct drive connection information, will then be written to the replacement disk.

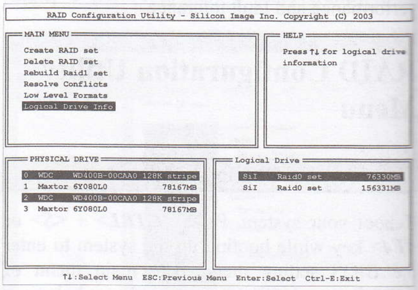
NOTE: For more information on RAID function, please refer to the RAID Management Software enclosed in the CD that came packed with this motherboard.

Option 5
Low Level Format

This item allows you to do the "Low Level Format" for each single HDD one at a time.

Option 6
Logical Drive Info

This item displays the drive information of the RAID type you had built.



```
RAID Configuration Utility - Silicon Image Inc. Copyright (C) 2003

MAIN MENU                                    HELP
  Create RAID set                              Press ↑↓ for logical drive
  Delete RAID set                              information
  Rebuild Raid1 set
  Resolve Conflicts
  Low Level Formats
  Logical Drive Info

PHYSICAL DRIVE                               Logical Drive
  0  WDC     WD400B-00CAA0 128K stripe         SiI    Raid0 set        76330MB
  1  Maxtor  6Y080L0             78167MB       SiI    Raid0 set       156331MB
  2  WDC     WD400B-00CAA0 128K stripe
  3  Maxtor  6Y080L0             78167MB

     ↑↓:Select Menu   ESC:Previous Menu   Enter:Select   Ctrl-E:Exit
```

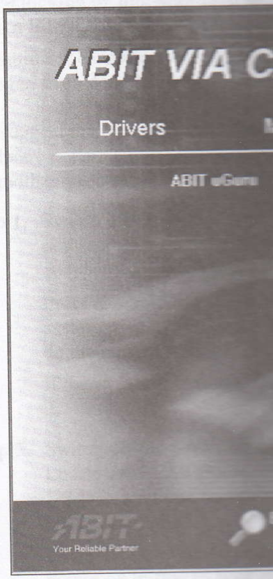
Appendix G. Install A

ABIT µGuru is a fresh Microprocessor d
This processor combines the current A
interface, providing users a perfect enviro

ABIT µGuru family currently includes si

1. *ABIT EQ*
2. *ABIT FanEQ*
3. *ABIT OC Guru*
4. *ABIT FlashMenu*
5. *ABIT AudioEQ*
6. *ABIT BlackBox*

To install the ABIT µGuru driver, pleas
execute the installation program automat
of this CD to enter the installation menu



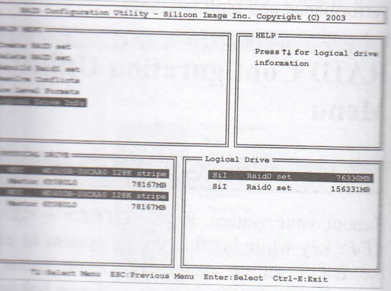
Move your mouse to "ABIT Utility"
complete the driver installation.

Option 5
Low Level Format

his item allows you to do the "Low Level ormat" for each single HDD one at a time.

Option 6
Logical Drive Info

is item displays the drive information of the AID type you had built.



```
RAID Configuration Utility - Silicon Image Inc. Copyright (C) 2003
                                        HELP
                                        Press ↑↓ for logical drive
                                        information

                        128K stripe     Logical Drive
                            78167MB     SiI   Raid0 set      76330MB
                        128K stripe     SiI   Raid0 set     156331MB
                            78167MB

  ↑↓:Select Menu  ESC:Previous Menu  Enter:Select  Ctrl-E:Exit
```

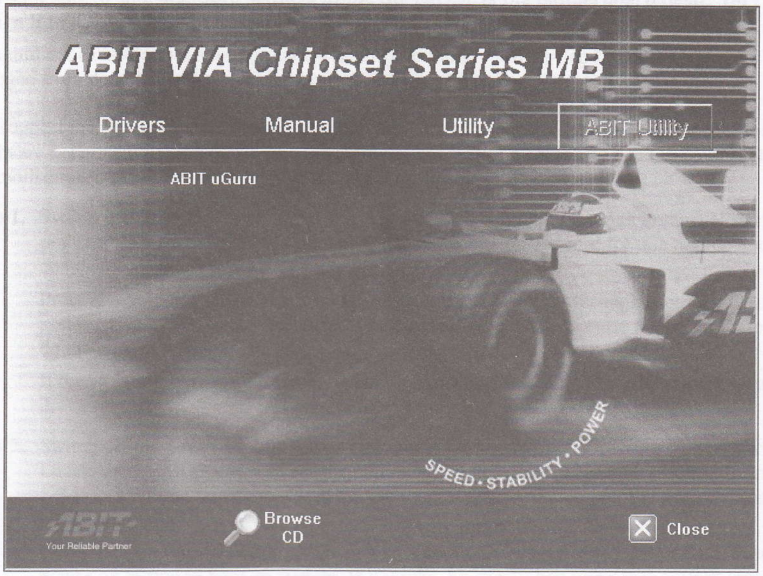
Appendix G. Install ABIT µGuru Driver

ABIT µGuru is a fresh Microprocessor developed by ABIT engineers used only on ABIT motherboards. This processor combines the current ABIT engineered features into a user-friendly Windows-based interface, providing users a perfect environment to maximize PC performance and stability.

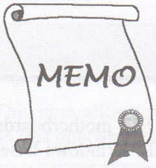
ABIT µGuru family currently includes six categories:

1. *ABIT EQ*
2. *ABIT FanEQ*
3. *ABIT OC Guru*
4. *ABIT FlashMenu*
5. *ABIT AudioEQ*
6. *ABIT BlackBox*

To install the ABIT µGuru driver, please insert the Driver & Utility CD into CD-ROM drive. It should execute the installation program automatically. If not, double-click the execution file at the main directory of this CD to enter the installation menu. The following screen appears.



Move your mouse to "ABIT Utility" tab. Click [ABIT µGuru]. Follow the on-screen instruction to complete the driver installation.



Appendix H. Troubl

Q & A:

Q: Do I need to clear the CMOS system?

A: Yes, we highly recommend tha move the CMOS jumper from i you boot up your system for the optimized defaults.

Q: If my systems hang when I up do?

A: Whenever you update the BIOS clear CMOS jumper before boo

Q: Why the system fails to boot

A: Please keep a 30-second interva

Q: Why the system failed to bo over-clocking or non-standar return it to where I bought fr

A: It should not cause hardware or changed from default to over-cl

We suggest the following three hardware default status, and the the motherboard to where you b

Step 1. Switch off the power s power switch on the p connect it back.

Press and hold the <In system. If it works, loo do the correct settings.

If the situation remain 2.

Step 2. Switch off the power s Locate the CCMOS ju 1-2 to 2-3 for one min position.

Close the chassis and power-on button to bo to do the correct settin

If the situation remain

Step 3. The same procedure a ATX power connector discharging.

Appendix H. Troubleshooting (Need Assistance?)

Q & A:

Q: Do I need to clear the CMOS before I use a new motherboard to assemble my new computer system?

A: Yes, we highly recommend that you clear the CMOS before installing a new motherboard. Please move the CMOS jumper from its default 1-2 position to 2-3 for a few seconds, and then back. When you boot up your system for the first time, follow the instructions in the user's manual to load the optimized defaults.

Q: If my systems hang when I update the BIOS or set the wrong CPU parameters, what should I do?

A: Whenever you update the BIOS or if the system hangs due to wrong CPU parameters setting, always clear CMOS jumper before booting up again.

Q: Why the system fails to boot up again right after a mechanical power-off?

A: Please keep a 30-second interval between each mechanical power On/Off.

Q: Why the system failed to boot up and nothing was displayed on the screen after I did some over-clocking or non-standard settings inside the BIOS? Is the motherboard dead? Do I need to return it to where I bought from or go through an RMA process?

A: It should not cause hardware or permanent damage to motherboard when BIOS settings were changed from default to over-clocking or non-standard status.

We suggest the following three troubleshooting methods to discharge CMOS data, recover the hardware default status, and then make the motherboard working again. No need to bother returning the motherboard to where you bought from or go through an RMA process.

Step 1. Switch off the power supply unit and then switch it on again after one minute. If there is no power switch on the power supply unit, disconnect its power cord for one minute and then connect it back.

Press and hold the <Insert> key on the keyboard, press the power-on button to boot up system. If it works, loose the <Insert> key and hit <Del> key to enter the BIOS setup page to do the correct settings.

If the situation remains the same, repeat the procedures in Step 1 for three times, or try Step 2.

Step 2. Switch off the power supply unit or disconnect the power cord. Open the chassis cover. Locate the CCMOS jumper near the button battery. Change the jumper position from default 1-2 to 2-3 for one minute to discharge the CMOS data, and then put it back to default 1-2 position.

Close the chassis and switch on the power supply unit or plug in the power cord. Press the power-on button to boot up system. If it works, hit <Del> key to enter the BIOS setup page to do the correct settings.

If the situation remains the same, try Step 3.

Step 3. The same procedure as Step 2, but in the meantime of discharging the CMOS data, pull out ATX power connectors from motherboard and remove the button battery during CMOS discharging.

Q: How can I get a quick response to my request for technical support?

A: Be sure to follow the guidelines as stated in the "Technical Support Form" section of this manual.

If you have a problem during operation, in order to help our technical support personnel quickly determine the problem with your motherboard and give you the answers you need, before filling in the technical support form, eliminate any peripheral that is not related to the problem, and indicate it on the form. Fax this form to your dealer or to the company where you bought the hardware in order to benefit from our technical support. (You can refer to the examples given below)

Example 1:

With a system including: motherboard (with CPU, DRAM, COAST...) HDD, CD-ROM, FDD, VGA CARD, MPEG CARD, SCSI CARD, SOUND CARD, etc. After the system is assembled, if you cannot boot up, check the key components of the system using the procedure described below. First remove all interface cards except the VGA card and try to reboot.

If you still cannot boot up: Try installing another brand/model VGA card and see if the system will start. If it still does not start, note the VGA card model, motherboard model, Bios identification number, CPU on the technical support form (refer to main instructions), and describe the problem in the problem description space provided.

If you can boot up: Insert the interface cards you have removed back into the system, one by one and try to start the system each time you insert a card, until the system will not start. Keep the VGA card and the interface card that caused the problem inserted on the motherboard, remove any other cards or peripheral, and start again. If you still cannot start, note the information related to both cards in the add-on Card space provided, and don't forget to indicate the motherboard model, version, BIOS identification number, CPU (refer to main instructions), and give a description of the problem.

Example 2:

With a system including the motherboard (with CPU, DRAM, COAST...) HDD, CD-ROM, FDD, VGA CARD, LAN CARD, MPEG CARD, SCSI CARD, SOUND CARD, after assembly and after having installed the Sound Card Driver, when you restart the system, when it runs the Sound Card Driver, it resets automatically. This problem may be due to the Sound Card Driver. During the Starting DOS... procedure, press SHIFT (BY-PASS) key, to skip CONFIG.SYS and AUTOEXEC.BAT; edit CONFIG.SYS with a text editor, and in function the line that loads the Sound Card Driver, add a remark REM, in order to disable the Sound Card Driver. See the example below.

```
CONFIG.SYS:
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE HIGHSCAN
DOS=HIGH, UMB
FILES=40
BUFFERS=36
REM DEVICEHIGH=C:\PLUGPLAY\DWCFGMG.SYS
LASTDRIVE=Z
```

Restart the system. If the system starts and does not reset, you can be sure that the problem is due to the Sound Card Driver. Write down the Sound Card model, motherboard model, BIOS identification number on the technical support file (refer to main instructions), and describe the problem in the space provided.

We will show you how to fill the "**Technical Support Form**".

Main instructions:

To fill in this "**Technical Support Form**",

1*. **MODEL:** Note the model number

Example: KV8-MAX3

2*. **Motherboard model number (REV):** motherboard as "REV:*.**".

Example: REV: 1.01

3*. **BIOS ID and Part Number:** See the

4. **DRIVER REV:** Note the driver version number indicated on the DEVICE DRIVER disk (if any) as "Release *.**". For example:

5*. **OS/APPLICATION:** Indicate the operating system and applications you are running on the system.

Example: MS-DOS® 6.22, Windows® 98 SE, Windows® 2000, etc

6*. **CPU:** Indicate the brand and the speed

Example:(A) In the "Brand" space, 1.9GHz".

7. **HDD:** Indicate the brand and ☐IDE2. If you know the disk indication, we will consider that your

Example: In the "HDD" space, check Specifications space, write "ST31621A

8. **CD-ROM Drive:** Indicate the brand IDE1 or ☐IDE2 , and check ("✓") CD-ROM is "☑IDE2" Master.

Example: In the "CD-ROM drive" Specifications space, write "FX-400D"

9. **System Memory (DDR SDRAM):** system memory. Such as Density, Latency, and Speed (MHz).

For example: In the Brand space, 128MB, **Description:** SS 16 Megx72 **Module Part Number:** MT9VDDT

Please give us the detailed problems you met.

10. **ADD-ON CARD:** Indicate which

If you cannot identify the problem's

NOTE: Items

for technical support?
"Technical Support Form" section of this manual.

der to help our technical support personnel quickly nd give you the answers you need, before filling in eral that is not related to the problem, and indicate it he company where you bought the hardware in order efer to the examples given below)

J, DRAM, COAST...) HDD, CD-ROM, FDD, VGA CARD, etc. After the system is assembled, if you e system using the procedure described below. First nd try to reboot.

er brand/model VGA card and see if the system will rd model, motherboard model, Bios identification r to main instructions), and describe the problem in

ou have removed back into the system, one by one card, until the system will not start. Keep the VGA em inserted on the motherboard, remove any other nnot start, note the information related to both cards orget to indicate the motherboard model, version, nstructions), and give a description of the problem.

CPU, DRAM, COAST...) HDD, CD-ROM, FDD, CARD, SOUND CARD, after assembly and after u restart the system, when it runs the Sound Card y be due to the Sound Card Driver. During the BY-PASS) key, to skip CONFIG.SYS and xt editor, and in function the line that loads the o disable the Sound Card Driver. See the example

IG.SYS

t reset, you can be sure that the problem is due to d model, motherboard model, BIOS identification n instructions), and describe the problem in the

Form".

Main instructions:

To fill in this "**Technical Support Form**", refer to the step-by-step instructions given below:

1*. **MODEL:** Note the model number given in your user's manual.

Example: KV8-MAX3

2*. **Motherboard model number (REV):** Note the motherboard model number labeled on the motherboard as "REV:*.**".

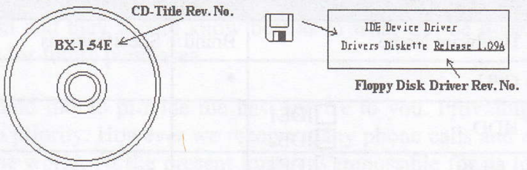
Example: REV: 1.01

3*. **BIOS ID and Part Number**: See the on screen message.

4. **DRIVER REV:** Note the driver version number indicated on the DEVICE DRIVER disk (if any) as "Release *.**". For example:

5*. **OS/APPLICATION:** Indicate the operating system and applications you are running on the system.

Example: MS-DOS® 6.22, Windows® 98 SE, Windows® 2000, etc....



6*. **CPU:** Indicate the brand and the speed (MHz) of your CPU.

Example:(A) In the "Brand" space, write "Intel"; in the "Specifications" space, write "Pentium® 4 1.9GHz".

7. **HDD:** Indicate the brand and specifications of your HDD(s); specify if the HDD is using ☐IDE1 or ☐IDE2. If you know the disk capacity, indicate it and check ("✓") "☐"; in case you give no indication, we will consider that your HDD is "☑IDE1" Master.

Example: In the "HDD" space, check the box; in the Brand space, write "Seagate"; in the Specifications space, write "ST31621A (1.6GB)".

8. **CD-ROM Drive:** Indicate the brand and specifications of your CD-ROM drive. Specify if it uses ☐ IDE1 or ☐IDE2 , and check ("✓") "☐"; in case you give no indication, we will consider that your CD-ROM is "☑IDE2" Master.

Example: In the "CD-ROM drive" space, check the box, in the Brand space, write "Mitsumi", in the Specifications space, write "FX-400D".

9. **System Memory (DDR SDRAM):** Indicate the brand and specifications (DDR DIMM) of your system memory. Such as Density, Description, Module Components, Module Part Number, CAS Latency, and Speed (MHz).

For example: In the Brand space, write "**Micron**"; in the Specifications space, write: **Density:** 128MB, **Description:** SS 16 Megx72 2.5V ECC Gold, **Module Components:** (9) 16 Megx 8, **Module Part Number:** MT9VDDT1672AG, **CAS Latency:** 2, **Speed (MHz):** 200 MHz.

Please give us the detailed information of your DDR SDRAM module; it will help us to simulate the problems you met.

10. **ADD-ON CARD:** Indicate which add-on cards you are *absolutely sure* are related to the problem.

If you cannot identify the problem's origin, indicate all the add-on cards inserted into your system.

NOTE: Items between the "*" are absolutely necessary.

Technical Support Form

Company Name: ☎ **Phone Number:**

Contact Person: **Fax Number:**

E-mail Address:

Model	*	BIOS ID #	*
Motherboard Model No.		DRIVER REV	
OS/Application	*		

Hardware Name	Brand	Specifications
CPU	*	
HDD	☐IDE1 ☐IDE2	
CD-ROM-Drive	☐IDE1 ☐IDE2	
System Memory		
ADD-ON CARD		

Problem Description:

Appendix I. How to G

(From our website) http://www.abit.co
(In North America) http://www.abit-us
(In Europe) http://www.abit.nl

Thank you for choosing ABIT produ
resellers and system integrators; we h
for tech support please check with you
are the ones who sold you your syste
how they serve you is a good reference

We appreciate every customer and w
fast service to our customers is our to
huge amount of email from all over t
respond to every single inquiry. There
that you may not receive a response.

We have done many compatibility te
the best quality and compatibility. I
understand the constraint we have and
to you first.

To expedite service, we recommend
contacting us. With your help, we can
greatest number of ABIT customers

1. **Check the Manual.** It sounds s
well-written and thorough manu
motherboards. The CD-ROM inc
drivers. If you don't have either o
FTP server.
2. **Download latest BIOS, softwar**
on our Website to check to see
periods of time to fixes bugs or i
latest drivers from your periphe
3. **Check the ABIT Technical Ter**
expand and make the FAQs mor
any suggestions. For hot topics, c

ort Form

ne Number:

Number:

*

Appendix I. How to Get Technical Support

(From our website) http://www.abit.com.tw
(In North America) http://www.abit-usa.com
(In Europe) http://www.abit.nl

Thank you for choosing ABIT products. ABIT sells all our products through distributors, resellers and system integrators; we have no direct sales to end-users. Before sending email for tech support please check with your resellers or integrators if you need any services, they are the ones who sold you your system and they should know best as to what can be done, how they serve you is a good reference for future purchases.

We appreciate every customer and would like to provide the best service to you. Providing fast service to our customers is our top priority. However we receive many phone calls and a huge amount of email from all over the world. At the present time it is impossible for us to respond to every single inquiry. Therefore it is quite possible that if you send an email to us that you may not receive a response.

We have done many compatibility tests and reliability tests to make sure our products have the best quality and compatibility. In case you need service or technical support, please understand the constraint we have and **always check with the reseller who sold the product to you first.**

To expedite service, we recommend that you follow the procedures outlined below before contacting us. With your help, we can meet our commitment to provide the best service to the **greatest number of ABIT customers:**

1. **Check the Manual.** It sounds simple but we have taken a lot of care in making a well-written and thorough manual. It is full of information that doesn't only pertain to motherboards. The CD-ROM included with your board will have the manual as well as drivers. If you don't have either one, go to our Program Download Area of the Website or FTP server.

2. **Download latest BIOS, software or drivers.** Please go to our Program Download area on our Website to check to see if you have the latest BIOS. They are developed over periods of time to fixes bugs or incompatibilities. **Also please make sure you have the latest drivers from your peripheral cards makers!**

3. **Check the ABIT Technical Terms Guide and FAQ on our Website.** We are trying to expand and make the FAQs more helpful and information rich. Let us know if you have any suggestions. For hot topics, check out our HOT FAQ!

4. **Internet Newsgroups.** They are a great source of information and many people there can offer help. ABIT's Internet News group, alt.comp.periphs.mainboard.abit, is an ideal forum for the public to exchange information and discuss experiences they have had with ABIT products. Many times you will see that your question has already been asked before. This is a public Internet news group and it is reserved for free discussions. Here is a list of some of the more popular ones:

   alt.comp.periphs.mainboard.abit
   comp.sys.ibm.pc.hardware.chips
   alt.comp.hardware.overclocking
   alt.comp.hardware.homebuilt
   alt.comp.hardware.pc-homebuilt

5. **Ask your reseller.** Your ABIT authorized distributor should be able to provide the fastest solution to your technical problem. We sell our products through distributors who sell to resellers and stores. Your reseller should be very familiar with your system configuration and should be able to solve your problem much more efficiently than we could. After all, your reseller regards you as an important customer who may purchase more products and who can urge your friends to buy from him or her as well. They integrated and sold the system to you. They should know best what your system configuration is and your problem. They should have reasonable return or refund policies. How they serve you is also a good reference for your next purchase.

6. **Contacting ABIT.** If you feel that you need to contact ABIT directly you can send email to the ABIT technical support department. First, please contact the support team for the branch office closest to you. They will be more familiar with local conditions and problems and will have better insight as to which resellers offer what products and services. Due to the huge number of emails coming in every day and other reasons, such as the time required for problem reproduction, we will not be able to reply to every email. Please understand that we are selling through distribution channels and don't have the resources to serve every end-user. However, we will try to do our best to help every customer. Please also remember that for many of our technical support team English is a second language, you will have a better chance of getting a helpful answer if your question can be understood in the first place. Be sure to use very, simple, concise language that clearly states the problem, avoid rambling or flowery language and always list your system components. Here is the contact information for our branch offices:

North America and South America:

ABIT Computer (U.S.A.) Corporatio
45531 Northport Loop West,
Fremont, California 94538, U.S.A.
Tel: 1-510-623-0500
Fax: 1-510-623-1092
sales@abit-usa.com
technical@abit-usa.com
http://www.abit-usa.com

U.K. and Ireland:

ABIT Computer (U.K.) Corporation Ltd.
Unit 3, 24-26 Boulton Road,
Stevenage, Herts SG1 4QX, U.K.
Tel: 44-1438-228888
Fax: 44-1438-226333
sales@abitcomputer.co.uk
technical@abitcomputer.co.uk

Germany, Benelux (Belgium, Netherlands, Luxembourg), Denmark, Norway, Sweden, Finland, and Switzerland:

AMOR Computer B.V. (ABIT's European Office)
Van Coehoornstraat 7,
5916 PH Venlo, The Netherlands
Tel: 31-77-3204428
Fax: 31-77-3204420
sales@abit.nl
technical@abit.nl
http://www.abit.nl

Austria, Czech, Romania, Bulgaria, Yugoslavia, Slovakia, Slovenia, Croati Bosnia, Serbia, and Macedonia:

Asguard Computer Ges.m.b.H
Schmalbachstrasse 5,
A-2201 Gerasdorf/Wien, Austria
Tel: 43-1-7346709
Fax: 43-1-7346713
asguard@asguard.at

e of information and many people there can
t.comp.periphs.mainboard.abit, is an ideal
and discuss experiences they have had with
your question has already been asked before.
eserved for free discussions. Here is a list of

ributor should be able to provide the fastest
r products through distributors who sell to
ery familiar with your system configuration
h more efficiently than we could. After all,
omer who may purchase more products and
r her as well. They integrated and sold the
t your system configuration is and your
or refund policies. How they serve you is

o contact ABIT directly you can send email
st, please contact the support team for the
more familiar with local conditions and
which resellers offer what products and
oming in every day and other reasons, such
we will not be able to reply to every email.
h distribution channels and don't have the
we will try to do our best to help every
of our technical support team English is a
ance of getting a helpful answer if your
ce. Be sure to use very, simple, concise
rambling or flowery language and always
t information for our branch offices:

North America and South America:

ABIT Computer (U.S.A.) Corporation
4553I Northport Loop West,
Fremont, California 94538, U.S.A.
Tel: 1-510-623-0500
Fax: 1-510-623-1092
sales@abit-usa.com
technical@abit-usa.com
http://www.abit-usa.com

U.K. and Ireland:

ABIT Computer (U.K.) Corporation Ltd.
Unit 3, 24-26 Boulton Road,
Stevenage, Herts SG1 4QX, U.K.
Tel: 44-1438-228888
Fax: 44-1438-226333
sales@abitcomputer.co.uk
technical@abitcomputer.co.uk

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Austria, Czech, Romania, Bulgaria, Yugoslavia, Slovakia, Slovenia, Croatia, Bosnia, Serbia, and Macedonia:

Asguard Computer Ges.m.b.H
Schmalbachstrasse 5,
A-2201 Gerasdorf/Wien, Austria
Tel: 43-1-7346709
Fax: 43-1-7346713
asguard@asguard.at

Japan:

ABIT Computer (Japan) Co. Ltd.
Fax: 81-3-5396-5110
http://www.abit4u.jp

Shanghai:

ABIT Computer (Shanghai) Co. Ltd.
Tel: 86-21-6235-1829
Fax: 86-21-6235-1832
http://www.abit.com.cn

Russia:

ABIT Computer (Russia) Co. Ltd.
Fax: 7-095-937-2837
techrussia@abit.com.tw
http://www.abit.ru

France, Italy, Spain, Portugal, and Greece:

ABIT Computer France SARL
Tel: 33-1-5858-0043
Fax: 33-1-5858-0047
http://www.abit.fr

All other territories not covered above please contact Taiwan Head Office:

When contacting our headquarters please Note we are located in Taiwan and we are 8+ GMT time. In addition, we have holidays that may be different from those in your country.

ABIT Computer Corporation
No.323, Yang Guang St., Neihu, Taipei, 114, Taiwan
Tel: 886-2-8751-8888
Fax: 886-2-8751-3382
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market@abit.com.tw
technical@abit.com.tw
http://www.abit.com.tw

7. **RMA Service.** If your system has been working but it just stopped, but you have not installed any new software or hardware recently, it is likely that you have a defective component. Please contact the reseller from whom you bought the product. You should be able to get RMA service there.

8. **Reporting Compatibility Problems to ABIT**. Because of tremendous number of email messages we receive every day, we are forced to give greater weight to certain types of messages than to others. For this reason, any compatibility problem that is reported to us, giving detailed system configuration information and error symptoms will receive the highest priority. For the other questions, we regret that we may not be able to reply directly. But your questions may be posted to the Internet news group in order that a larger number of users can have the benefit of the information. Please check the news group from time to time.

9. The information listed below are some **chipset vendors' WEB site addresses** for your reference:

   HighPoint Technology Inc.'s WEB site: http://www.highpoint-tech.com/
   Intel's WEB site: http://www.intel.com/
   Silicon Image's WEB site: http://www.siimage.com/
   SiS' WEB site: http://www.sis.com.tw/
   VIA's WEB site: http://www.via.com.tw/

Thank You

ABIT Computer Corporation

http://www.abit.com.tw

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www.abit.com.tw

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